

IBERIFIER — Iberian Digital Media Research and Fact-Checking Hub

# The Impact of Disinformation on the Media Industry in Spain and Portugal

Report

December 2022



IBERIFIER has received funding from the European Commission under the agreement CEF-TC-2020-2 (European Digital Media Observatory) with reference 2020-EU-IA-0252

Call identifier: European Health and Digital Executive Agency (HaDEA)

Type of funding scheme: Research and Innovation Action

Work program topic: Action No 2020-EU-IA-0252 Grant Agreement: INEA/CEF/ICT/A2020/2381931

Project Coordinator: Ramón Salaverría (University of Navarra)

Duration in months: 30 Submission date: 30/11/2022 Dissemination level: Public

Project coordinator: University of Navarra

Task 1.5.: Research on the business aspects of disinformation. Study on the impacts of disinformation in the business models and value chain of the media industry Deliverable Task Leader: Carolina Moreno-Castro (University of Valencia/ UVEG)

#### Cite this Report as:

Moreno-Castro, C., Paisana, M., (Coord.) et al. (2022). The impact of disinformation on the media industry in Spain and Portugal. Pamplona: IBERIFIER. https://doi.org/10.15581/026.001

Access more reports and publications at iberifier.eu

#### Coordinator



#### **Partners**





















































# List of participants in this report

Participant  OBERCOM team  Couraceiro, Paulo Paisana, Miguel OberCom - Communication Observatory OberCom - Communication Observatory Vasconcelos, António OberCom - Communication Observatory Vasconcelos, António OberCom - Communication Observatory  SCTE team Baldi, Vania ISCTE University Institute of Lisbon Cardoso, Gustavo ISCTE University Institute of Lisbon Crespo, Miguel Forá, Caterina ISCTE University Institute of Lisbon VEG team ISCTE University Institute of Lisbon UVEG team  Cano-Orón, Lorena Cabrera García-Ochoa, Yolanda Crespo, Amaia University of Valencia Caper-García, Guillermo Llorea-Abad, Germán University of Valencia University of Santiago de Compostela University University of Santiago de Compostela University Of Santiago					
Couraceiro, Paulo Paisana, Miguel OberCom - Communication Observatory Vasconcelos, António OberCom - Communication Observatory Vasconcelos, António OberCom - Communication Observatory  ISCTE team  Baldi, Vania ISCTE University Institute of Lisbon Cardoso, Gustavo ISCTE University Institute of Lisbon Crespo, Miguel ISCTE University Institute of Lisbon Foá, Caterina ISCTE University Institute of Lisbon ISCTE University Institute of Lisbon ISCTE University Institute of Lisbon Wargato, Dina ISCTE University Institute of Lisbon UVEG team Cano-Orón, Lorena University of Valencia Cabrera García-Ochoa, Yolanda Crespo, Amaia University of Valencia University of Valen	Participant	Type of Institution			
Couraceiro, Paulo Paisana, Miguel OberCom - Communication Observatory Vasconcelos, António OberCom - Communication Observatory Vasconcelos, António OberCom - Communication Observatory  ISCTE team  Baldi, Vania ISCTE University Institute of Lisbon Cardoso, Gustavo ISCTE University Institute of Lisbon Crespo, Miguel ISCTE University Institute of Lisbon Foá, Caterina Margato, Dina ISCTE University Institute of Lisbon ISCTE University Institute of Lisbon WEG team Cano-Orón, Lorena UVEG team Cano-Orón, Lorena UVEG team Cano-Orón, Lorena University of Valencia Carera García-Ochoa, Yolanda Crespo, Amaia López-García, Guillermo Llorca-Abad, Germán University of Valencia University of Vale	OBERCOM team				
Paisana, Miguel OberCom - Communication Observatory Vasconcelos, António OberCom - Communication Observatory  ISCTE team  Baldi, Vania ISCTE University Institute of Lisbon Cardoso, Gustavo ISCTE University Institute of Lisbon Crespo, Miguel ISCTE University Institute of Lisbon Foá, Caterina ISCTE University Institute of Lisbon Foá, Caterina ISCTE University Institute of Lisbon Margato, Dina ISCTE University Institute of Lisbon Margato, Dina ISCTE University Institute of Lisbon UVEG team  Cano-Orón, Lorena University of Valencia Cabrera García-Ochoa, Yolanda University of Valencia Crespo, Amaia University of Valencia López-García, Guillermo University of Valencia Llorca-Abad, Germán University of Valencia Moreno-Castro, Carolina University of Valencia Rubio-Candel, Soledat University of Valencia Serra-Perales, Ana University of Valencia Valera-Ordaz, Lidia University of Valencia Vengut-Climent, Empar University of Valencia Von Polheim-Franco, Paula University of Valencia UNAV team  Arrese, Ángel University of Navarra UNAV team  Arrese, Angel University of Navarra UNAV team  Toural, Carlos University of Santiago de Compostela Siva Rodríguez, Alba University of Santiago de Compostela UNAV team  Alcolea Díaz, Gema Rey Juan Carlos University Navarro Sierra, Nuría Rey Juan Carlos University Vinader Segura, Raquel Rey Juan Carlos University UNAV team  Puebla Martínez, Belén Rey Juan Carlos University Vinader Segura, Raquel Rey Juan Carlos University UNAV team  Pue Lara González, Alicia Miguel Hernández University UMH team  De Lara González, Alicia Miguel Hernández University UMH team  De Lara González, Alicia Miguel Hernández University UC3M team  Raúl Magallón University Carlos III  CEU team  Alcalá-Santaella Oria de Rueda, María Bonete Vizcaíno, Fernando San Pablo CEU University					
Vasconcelos, Ántónio  Baldi, Vania  Baldi, Vania  Baldi, Vania  SCTE team  SCTE University Institute of Lisbon Cardoso, Gustavo Crespo, Miguel Foá, Caterina SCTE University Institute of Lisbon Foá, Caterina SCTE University Institute of Lisbon Foá, Caterina SCTE University Institute of Lisbon SCTE University Institute of Lisbon SCTE University Institute of Lisbon Were the Margato, Dina USCTE University Institute of Lisbon USCTE University of Valencia					
Baldi, Vania ISCTE team ISCTE University Institute of Lisbon Cardoso, Gustavo ISCTE University Institute of Lisbon Crespo, Miguel ISCTE University Institute of Lisbon Foá, Caterina ISCTE University Institute of Lisbon UVEG team University of Valencia University University of Valencia University University Of Valencia University University Of Valencia University University University University University University Un					
Baldi, Vania ISCTE University Institute of Lisbon Cardoso, Gustavo ISCTE University Institute of Lisbon Crespo, Miguel ISCTE University Institute of Lisbon Foá, Caterina ISCTE University Institute of Lisbon UVEG team  Cano-Orón, Lorena University of Valencia University of Navarra University of Santiago de Compostela University Office team Rey Juan Carlos University Navarro Sierra, Nuria Rey Juan Carlos University University Office Agarcía, Alba Miguel Hernández University University University Carlos III CEU team San Pablo CEU University					
Cardoso, Gustavo Crespo, Miguel Foá, Caterina Rorato, Dina Cano-Orón, Lorena Cane-García-Ochoa, Yolanda Capera García-Ochoa, Yolanda Chera-Cardo, Germán Moreno-Castro, Carolina Vengut-Cilment, Empar Von Polheim-Franco, Paula Marfinez-Costa, María Pilar Salaverría, Ramón Arrese, Ángel Toural, Carlos Sixto García, José Sixto García, José Sixto García, José Navarro Sistro García Suniversity of Santiago de Compostela Sixto García, José University of Santiago de Compostela University of Santiago de Compostela University of Santiago de Compostela University of Santiago de Courbersity Vinader Segura, Raquel Raúl Magallón Raúl Magallón Raúl Magallón CEU team Raúl Magallón Gelado, Roberto San Pablo CEU University Can Pablo CEU University					
Crespo, Miguel ISCTE University Institute of Lisbon Foâ, Caterina ISCTE University Institute of Lisbon Margato, Dina ISCTE University Institute of Lisbon UVEG team  Cano-Orón, Lorena University of Valencia Crespo, Amaia University of Valencia University Oantor Oatro University Vinader Segura, Raquel Rey Juan Carlos University San Pablo CEU University Sa					
Foá, Caterina Margato, Dina ISCTE University Institute of Lisbon ISCTE University Institute of Lisbon UVEG team  Cano-Orón, Lorena Cabrera García-Ochoa, Yolanda University of Valencia Crespo, Amaia López-García, Guillermo Llorca-Abad, Germán Moreno-Castro, Carolina Rubio-Candel, Soledat Serra-Perales, Ana University of Valencia University of	,				
Margato, Dina UVEG team  Cano-Orón, Lorena University of Valencia Cabrera García-Ochoa, Yolanda University of Valencia Crespo, Amaia University of Valencia López-García, Guillermo University of Valencia Llorca-Abad, Germán University of Valencia Moreno-Castro, Carolina University of Valencia Rubio-Candel, Soledat University of Valencia Serra-Perales, Ana University of Valencia Valera-Ordaz, Lidia University of Valencia Von Polheim-Franco, Paula University of Valencia  Van Valera-Costa, María Pilar University of Navarra  Martínez-Costa, María Pilar University of Navarra  Salaverría, Ramón University of Navarra  USC team  Toural, Carlos University of Santiago de Compostela Silva Rodríguez, Alba University of Santiago de Compostela University Of San Pablo CEU University Gelado, Roberto San Pablo CEU University					
Cano-Orón, Lorena University of Valencia Cabrera García-Ochoa, Yolanda University of Valencia Crespo, Amaia University of Valencia López-García, Guillermo University of Valencia Llorca-Abad, Germán University of Valencia Rubio-Candel, Soledat University of Valencia Serra-Perales, Ana University of Valencia Valera-Ordaz, Lidia University of Valencia Vengut-Climent, Empar University of Valencia Von Polheim-Franco, Paula University of Valencia UNAV team  Arrese, Ángel University of Navarra Martínez-Costa, María Pilar University of Navarra Salaverría, Ramón University of Santiago de Compostela Sitva Rodríguez, Alba University of Santiago de Compostela UNJO team  Toural, Carlos University of Santiago de Compostela UNJO team Alcolea Díaz, Gema Rey Juan Carlos University Navarro Sierra, Nuria Rey Juan Carlos University Vinader Segura, Raquel Rey Juan Carlos University UMH team  De Lara González, Alicia Miguel Hernández University Valero Pastor, José María  Raúl Magallón University Carlos III CEU team  Alcalá-Santaella Oria de Rueda, María Bonete Vizcaíno, Fernando San Pablo CEU University Galado, Roberto San Pablo CEU University					
Cano-Orón, Lorena Cabrera García-Ochoa, Yolanda Crespo, Amaia López-García, Guillermo Llorca-Abad, Germán Llorca-Abad, Germán Moreno-Castro, Carolina Rubio-Candel, Soledat Valera-Ordaz, Lidia Vangut-Climent, Empar Von Polheim-Franco, Paula Martínez-Costa, María Pilar Salaverría, Ramón Toural, Carlos Sitva Rodríguez, Alba Sitva García, José Miguel Hernández University Vinader Segura, Raquel De Lara González, Alicia Magallón CEU team Rubio-Candel, Soledat University of Valencia U	Wai gato, Billa				
Cabrera García-Ochoa, Yolanda Crespo, Amaia López-García, Guillermo Llorca-Abad, Germán Moreno-Castro, Carolina Rubio-Candel, Soledat Valeracia Valera-Ordaz, Lidia Vengut-Climent, Empar Martínez-Costa, María Pilar Silva Rodríguez, Alba Silva Rodríguez, Alba Silva Rodríguez, Alba Silva Rodríguez, Alba Alcolea Díaz, Gema Alcolea Díaz, Gema Alcolea Díaz, Gema Rey Juan Carlos University Vinader Segura, Raquel CEU team Raúl Magallón Ruiversity of Valencia University of Santiago University of Navarra University of Navarra University of Santiago de Compostela University Vinader Segura, Raquel Rey Juan Carlos University Navarro Sierra, Nuria Rey Juan Carlos University UMH team De Lara González, Alicia Miguel Hernández University Valero Pastor, José María Niguel Hernández University UC3M team Raúl Magallón University Carlos III CEU team Alcalá-Santaella Oria de Rueda, María Bonete Vizcaíno, Fernando San Pablo CEU University	Cano-Orón, Lorena				
Crespo, Amaia López-García, Guillermo Llorca-Abad, Germán Moreno-Castro, Carolina Rubio-Candel, Soledat Valencia Valencia Valencia Valencia Valencia Valencia Valencia Valencia Von Polheim-Franco, Paula Martínez-Costa, María Bonete Vizcaíno, Albad Magallón  Alcalaá-Santaella Oria de Rueda, María Bonete Vizcaíno, Fernando  Carolina University of Valencia University Uriversity of Valencia University of Valencia U	· ·				
López-García, Guillermo Llorca-Abad, Germán Moreno-Castro, Carolina Moreno-Castro, Carolina Rubio-Candel, Soledat Serra-Perales, Ana Valera-Ordaz, Lidia Vangut-Climent, Empar Von Polheim-Franco, Paula Martínez-Costa, María Pilar Salaverría, Ramón Toural, Carlos Silva Rodríguez, Alba Silva Rodríguez, Alba Alcolea Díaz, Gema Alcolea Díaz, Gema Puebla Martínez, Belén Raúl Mayarro Segura, Raquel Alcolea Costa, Alba Navarro Sierra, Nuría Navarro Sierra, Nuría Magallón Alcolea Magallón CEU team Raúl Magallón San Pablo CEU University Garalos University San Pablo CEU University CEU team Alcolea University San Pablo CEU University					
Llorca-Abad, Germán Moreno-Castro, Carolina Rubio-Candel, Soledat Serra-Perales, Ana Valera-Ordaz, Lidia Vengut-Climent, Empar Von Polheim-Franco, Paula Martínez-Costa, María Pilar Salaverría, Ramón Toural, Carlos Silva Rodríguez, Alba Siva García, José Rubla Martínez, Belén Rey Juan Carlos University Vinader Segura, Raquel Rey Juan Carlos University Vinader Segura, Raquel Raúl Magallón CEU team Raúl Magallón CEU team Runiversity Callonia University of Valencia University of Valencia University of Valencia University of Navarra University of Navarra University of Navarra University of Navarra University of Santiago de Compostela University of Santiago de Compostela University of Santiago de Compostela URJC team Alcolea Díaz, Gema Rey Juan Carlos University Rey Juan Carlos University UMH team De Lara González, Alicia Raúl Magallón University Carlos III CEU team Raúl Magallón San Pablo CEU University San Pablo CEU University San Pablo CEU University San Pablo CEU University					
Moreno-Castro, Carolina Rubio-Candel, Soledat Rubio-Candel, Soledat Serra-Perales, Ana Valera-Ordaz, Lidia Vengut-Climent, Empar Von Polheim-Franco, Paula Martínez-Costa, María Pilar Salaverría, Ramón Toural, Carlos Silva Rodríguez, Alba Sixto García, José Alcolea Díaz, Gema Alcolea Carga, Raquel De Lara González, Alicia García, Alba Magallón Alcolea Díaz de Rueda, María Bonete Vizcaíno, Fernando Alcolea Díaz de Rueda, María Bonete Vizcaíno, Fernando Gelado, Roberto Alcolea Carga Alcolea Driaz de Rueda, María Bonete Vizcaíno, Fernando Gelado, Roberto Sulviversity of Soundand University of Santiago de Compostela University University of Santiago de Compostela University University of Santiago de Compostela University Oniversity Oniversity University Oniversity University Oniversity On					
Rubio-Candel, Soledat Serra-Perales, Ana University of Valencia Valera-Ordaz, Lidia University of Valencia Vengut-Climent, Empar University of Valencia UNAV team  Arrese, Ángel University of Navarra Martínez-Costa, María Pilar Salaverría, Ramón UsC team  Toural, Carlos UsC team  Toural, Carlos University of Santiago de Compostela Silva Rodríguez, Alba University of Santiago de Compostela URJC team Alcolea Díaz, Gema Rey Juan Carlos University Rey Juan Carlos University Navarro Sierra, Nuria Rey Juan Carlos University Vinader Segura, Raquel Rey Juan Carlos University UMH team  De Lara González, Alicia Miguel Hernández University Valero Pastor, José María Miguel Hernández University UC3M team  Raúl Magallón University Carlos III CEU team  Alcalá-Santaella Oria de Rueda, María San Pablo CEU University Gelado, Roberto San Pablo CEU University					
Serra-Perales, Ana University of Valencia Valera-Ordaz, Lidia University of Valencia Vengut-Climent, Empar University of Valencia Von Polheim-Franco, Paula University of Valencia  UNAV team  Arrese, Ángel University of Navarra  Martínez-Costa, María Pilar University of Navarra Salaverría, Ramón University of Navarra  USC team  Toural, Carlos University of Santiago de Compostela Silva Rodríguez, Alba University of Santiago de Compostela Silva García, José University of Santiago de Compostela UNJC team  Alcolea Díaz, Gema Rey Juan Carlos University Puebla Martínez, Belén Rey Juan Carlos University Navarro Sierra, Nuria Rey Juan Carlos University Vinader Segura, Raquel Rey Juan Carlos University UMH team  De Lara González, Alicia Miguel Hernández University Valero Pastor, José María Miguel Hernández University UC3M team  Raúl Magallón University Carlos III CEU team  Alcalá-Santaella Oria de Rueda, María Bonete Vizcaíno, Fernando San Pablo CEU University San Pablo CEU University					
Valera-Ordaz, Lidia Vengut-Climent, Empar Von Polheim-Franco, Paula  Von Polheim-Franco, Paula  UNAV team  Arrese, Ángel Martínez-Costa, María Pilar Salaverría, Ramón University of Navarra  USC team  Toural, Carlos Silva Rodríguez, Alba Sixto García, José URJC team  Alcolea Díaz, Gema Puebla Martínez, Belén Navarro Sierra, Nuria Navarro Sierra, Nuria Rey Juan Carlos University Vinader Segura, Raquel  De Lara González, Alicia Miguel Hernández University Valero Pastor, José María  De Lara Gora de Rueda, María Rey Juan Carlos University Miguel Hernández University					
Vengut-Climent, Empar Von Polheim-Franco, Paula  UNAV team  Arrese, Ángel Martínez-Costa, María Pilar Salaverría, Ramón  Toural, Carlos Silva Rodríguez, Alba Sixto García, José URJC team  Alcolea Díaz, Gema Puebla Martínez, Belén Navarro Sierra, Nuria Navarro Sierra, Nuria Navarro Sierra, Raquel De Lara González, Alicia De Lara González, Alicia Raúl Magallón  Raúl Magallón  Alcalé-Santaella Oria de Rueda, María Bonete Vizcaíno, Fernando Guniversity of Valencia University of Navarra University of Santiago de Compostela University Rey Juan Carlos University Winader Segura, Raquel Rey Juan Carlos University Winguel Hernández University UMH team University Carlos III CEU team Alcalá-Santaella Oria de Rueda, María San Pablo CEU University San Pablo CEU University					
Von Polheim-Franco, Paula  UNAV team  Arrese, Ángel  Martínez-Costa, María Pilar  Salaverría, Ramón  USC team  Toural, Carlos  Silva Rodríguez, Alba  Sixto García, José  URJC team  Alcolea Díaz, Gema  Puebla Martínez, Belén  Navarro Sierra, Nuria  Puebla Martínez, Belén  Rey Juan Carlos University  Vinader Segura, Raquel  De Lara González, Alicia  García, Alba  Miguel Hernández University  Valero Pastor, José María  Rey Juan Carlos University  Miguel Hernández University  UC3M team  Alcalá-Santaella Oria de Rueda, María  Bonete Vizcaíno, Fernando  San Pablo CEU University					
Arrese, Ángel University of Navarra  Martínez-Costa, María Pilar University of Navarra  Salaverría, Ramón University of Navarra  USC team  Toural, Carlos University of Santiago de Compostela Silva Rodríguez, Alba University of Santiago de Compostela Sixto García, José University of Santiago de Compostela URJC team  Alcolea Díaz, Gema Rey Juan Carlos University Puebla Martínez, Belén Rey Juan Carlos University Navarro Sierra, Nuria Rey Juan Carlos University Vinader Segura, Raquel Rey Juan Carlos University UMH team  De Lara González, Alicia Miguel Hernández University Valero Pastor, José María Miguel Hernández University UC3M team  Raúl Magallón University Carlos III  CEU team  Alcalá-Santaella Oria de Rueda, María San Pablo CEU University Gelado, Roberto San Pablo CEU University		University of Valencia			
Arrese, Ángel University of Navarra  Martínez-Costa, María Pilar University of Navarra  Salaverría, Ramón University of Navarra  USC team  Toural, Carlos University of Santiago de Compostela Silva Rodríguez, Alba University of Santiago de Compostela Sixto García, José University of Santiago de Compostela URJC team  Alcolea Díaz, Gema Rey Juan Carlos University Puebla Martínez, Belén Rey Juan Carlos University Navarro Sierra, Nuria Rey Juan Carlos University Vinader Segura, Raquel Rey Juan Carlos University UMH team  De Lara González, Alicia Miguel Hernández University Valero Pastor, José María Miguel Hernández University UC3M team  Raúl Magallón University Carlos III  CEU team  Alcalá-Santaella Oria de Rueda, María San Pablo CEU University Gelado, Roberto San Pablo CEU University	voir i omomi i ranoc, i adia	UNAV team			
Martínez-Costa, María Pilar Salaverría, Ramón University of Navarra  USC team  Toural, Carlos University of Santiago de Compostela Silva Rodríguez, Alba University of Santiago de Compostela Sixto García, José University of Santiago de Compostela University Puelda María or San Pablo CEU University University University Orional III CEU team Alcalá-Santaella Oria de Rueda, María oria de Ru	Arrese, Ángel				
Salaverría, Ramón  USC team  Toural, Carlos University of Santiago de Compostela Silva Rodríguez, Alba University of Santiago de Compostela Sixto García, José University of Santiago de Compostela URJC team  Alcolea Díaz, Gema Rey Juan Carlos University Puebla Martínez, Belén Rey Juan Carlos University Navarro Sierra, Nuria Rey Juan Carlos University Vinader Segura, Raquel Rey Juan Carlos University UMH team  De Lara González, Alicia Miguel Hernández University Valero Pastor, José María Miguel Hernández University UC3M team  Raúl Magallón University Carlos III  CEU team  Alcalá-Santaella Oria de Rueda, María San Pablo CEU University Gelado, Roberto San Pablo CEU University					
Toural, Carlos University of Santiago de Compostela Silva Rodríguez, Alba University of Santiago de Compostela Sixto García, José University of Santiago de Compostela URJC team Alcolea Díaz, Gema Rey Juan Carlos University Puebla Martínez, Belén Rey Juan Carlos University Navarro Sierra, Nuria Rey Juan Carlos University Vinader Segura, Raquel Rey Juan Carlos University UMH team De Lara González, Alicia Miguel Hernández University Valero Pastor, José María Miguel Hernández University UC3M team Raúl Magallón University Carlos III CEU team Alcalá-Santaella Oria de Rueda, María San Pablo CEU University Bonete Vizcaíno, Fernando San Pablo CEU University Gelado, Roberto					
Toural, Carlos Silva Rodríguez, Alba University of Santiago de Compostela Sixto García, José UNJC team Alcolea Díaz, Gema Rey Juan Carlos University Puebla Martínez, Belén Rey Juan Carlos University Navarro Sierra, Nuria Rey Juan Carlos University Vinader Segura, Raquel Rey Juan Carlos University UMH team De Lara González, Alicia García, Alba Miguel Hernández University Valero Pastor, José María Raúl Magallón University Carlos III CEU team Alcalá-Santaella Oria de Rueda, María San Pablo CEU University Gelado, Roberto San Pablo CEU University					
Silva Rodríguez, Alba Sixto García, José University of Santiago de Compostela URJC team  Alcolea Díaz, Gema Rey Juan Carlos University Puebla Martínez, Belén Rey Juan Carlos University Navarro Sierra, Nuria Rey Juan Carlos University Vinader Segura, Raquel Rey Juan Carlos University UMH team  De Lara González, Alicia Miguel Hernández University García, Alba Miguel Hernández University Valero Pastor, José María Miguel Hernández University UC3M team  Raúl Magallón University Carlos III CEU team  Alcalá-Santaella Oria de Rueda, María Bonete Vizcaíno, Fernando Gelado, Roberto San Pablo CEU University San Pablo CEU University	Toural, Carlos				
Sixto García, José  URJC team  Alcolea Díaz, Gema Puebla Martínez, Belén Navarro Sierra, Nuria Pegura, Raquel Pe Lara González, Alicia García, Alba Valero Pastor, José María Rey Juan Carlos University Winagallón Rey Juan Carlos University Winguel Hernández University Winguel Hernández University UC3M team  Raúl Magallón University Carlos III CEU team  Alcalá-Santaella Oria de Rueda, María Bonete Vizcaíno, Fernando Gelado, Roberto San Pablo CEU University San Pablo CEU University San Pablo CEU University					
Alcolea Díaz, Gema Rey Juan Carlos University Puebla Martínez, Belén Rey Juan Carlos University Navarro Sierra, Nuria Rey Juan Carlos University Vinader Segura, Raquel Rey Juan Carlos University UMH team  De Lara González, Alicia Miguel Hernández University García, Alba Miguel Hernández University Valero Pastor, José María Miguel Hernández University UC3M team  Raúl Magallón University Carlos III CEU team  Alcalá-Santaella Oria de Rueda, María San Pablo CEU University Bonete Vizcaíno, Fernando San Pablo CEU University Gelado, Roberto San Pablo CEU University					
Alcolea Díaz, Gema Rey Juan Carlos University Puebla Martínez, Belén Rey Juan Carlos University Navarro Sierra, Nuria Rey Juan Carlos University Vinader Segura, Raquel Rey Juan Carlos University WMH team  De Lara González, Alicia Miguel Hernández University Valero Pastor, José María Miguel Hernández University Valero Pastor, José María Raúl Magallón University Carlos III CEU team  Alcalá-Santaella Oria de Rueda, María San Pablo CEU University Bonete Vizcaíno, Fernando San Pablo CEU University Gelado, Roberto San Pablo CEU University	UR.IC team				
Puebla Martínez, Belén Rey Juan Carlos University Navarro Sierra, Nuria Rey Juan Carlos University Vinader Segura, Raquel Rey Juan Carlos University  UMH team  De Lara González, Alicia Miguel Hernández University García, Alba Miguel Hernández University Valero Pastor, José María Miguel Hernández University  UC3M team  Raúl Magallón University Carlos III  CEU team  Alcalá-Santaella Oria de Rueda, María San Pablo CEU University Bonete Vizcaíno, Fernando San Pablo CEU University Gelado, Roberto San Pablo CEU University	Alcolea Díaz, Gema				
Navarro Sierra, Nuria Rey Juan Carlos University Vinader Segura, Raquel Rey Juan Carlos University  UMH team  De Lara González, Alicia Miguel Hernández University García, Alba Miguel Hernández University Valero Pastor, José María Miguel Hernández University UC3M team  Raúl Magallón University Carlos III CEU team  Alcalá-Santaella Oria de Rueda, María Bonete Vizcaíno, Fernando San Pablo CEU University Gelado, Roberto San Pablo CEU University					
Vinader Segura, Raquel  Bey Juan Carlos University  UMH team  De Lara González, Alicia  García, Alba  Valero Pastor, José María  Raúl Magallón  Raúl Magallón  CEU team  Alcalá-Santaella Oria de Rueda, María  Bonete Vizcaíno, Fernando  Gelado, Roberto  Rey Juan Carlos University  Miguel Hernández University  Miguel Hernández University  UC3M team  University Carlos III  CEU team  San Pablo CEU University  San Pablo CEU University					
De Lara González, Alicia  Miguel Hernández University García, Alba Miguel Hernández University Valero Pastor, José María  Miguel Hernández University UC3M team Raúl Magallón University Carlos III CEU team Alcalá-Santaella Oria de Rueda, María San Pablo CEU University Bonete Vizcaíno, Fernando Gelado, Roberto San Pablo CEU University San Pablo CEU University					
De Lara González, Alicia  García, Alba  Miguel Hernández University  Valero Pastor, José María  Miguel Hernández University  WC3M team  Raúl Magallón  University Carlos III  CEU team  Alcalá-Santaella Oria de Rueda, María  Bonete Vizcaíno, Fernando  Gelado, Roberto  Miguel Hernández University  Miguel Hernández University  San Pablo CEU University  San Pablo CEU University  San Pablo CEU University	vinador cogura, riaquor				
García, Alba Miguel Hernández University Valero Pastor, José María Miguel Hernández University  UC3M team  Raúl Magallón University Carlos III  CEU team  Alcalá-Santaella Oria de Rueda, María San Pablo CEU University Bonete Vizcaíno, Fernando San Pablo CEU University Gelado, Roberto San Pablo CEU University	De Lara González, Alicia				
Valero Pastor, José María  Miguel Hernández University  UC3M team  Raúl Magallón  University Carlos III  CEU team  Alcalá-Santaella Oria de Rueda, María  Bonete Vizcaíno, Fernando  Gelado, Roberto  San Pablo CEU University  San Pablo CEU University  San Pablo CEU University					
Raúl Magallón University Carlos III  CEU team  Alcalá-Santaella Oria de Rueda, María San Pablo CEU University Bonete Vizcaíno, Fernando San Pablo CEU University Gelado, Roberto San Pablo CEU University	,				
Raúl Magallón  CEU team  Alcalá-Santaella Oria de Rueda, María Bonete Vizcaíno, Fernando Gelado, Roberto  University Carlos III  San Pablo CEU University  San Pablo CEU University  San Pablo CEU University	taioro i actor, coco maria	j			
Alcalá-Santaella Oria de Rueda, María  Bonete Vizcaíno, Fernando  Gelado, Roberto  SEU team  San Pablo CEU University  San Pablo CEU University  San Pablo CEU University	Baúl Magallón				
Alcalá-Santaella Oria de Rueda, María  San Pablo CEU University  Bonete Vizcaíno, Fernando  San Pablo CEU University  Gelado, Roberto  San Pablo CEU University					
Bonete Vizcaíno, Fernando San Pablo CEU University Gelado, Roberto San Pablo CEU University					
Gelado, Roberto San Pablo CEU University					
	,				
Maldita.es team		·			
Hernández Escayola, Pablo Maldita fact-checking organisation					



# Table of contents

I ABLE OF FIGURES	6
1. Introduction on dis/misinformation's impact on Spain and Portugal med	NΑ
ECOSYSTEM	8
1.1. Impact evaluation of dis/misinformation on people's trust	10
1.1.1. Impact evaluation of dis/misinformation on business media	13
2. SUMMARY OF THE EVALUATION PROCESS	23
2.1. Impact dis/misinformation in Spain. Methodology general description	23
2.1.1. Methodology: flow diagram (quantitative and qualitative data)	23
2.1.2. Survey (general audience)	24
2.1.3. Questionnaire design	24
2.1.4. Questionnaires' implementation on social networks	30
2.1.5. In-depth interviews	30
2.1.6. Selection of the media's editors and publishers	30
2.1.7. Questionnaire design	32
2.1.8. Recording of interviews	33
2.2. Impact dis/misinformation in Portugal. Methodology general description	n.33
2.2.1. Methodology: flow diagram (quantitative and qualitative data)	34
2.2.2. Survey (general audience)	34
2.2.3. Questionnaire design	35
2.2.4. Questionnaires' implementation on social networks	40
2.2.5. In-depth interviews	41
2.2.6. Selection of the media editors and publishers	41
2.2.7. Questionnaire design	42
2.2.8. Recording of interviews	43
2.3. Results of the Spain online survey	44
2.3.1. Initial frequency analysis	44
2.4. Results of the Portugal online survey	63
2.4.1. Introduction	63
2.4.2 Data analysis	65
2.5. Results of the interviews with Spanish media editors	76
2.5.1. Media protocols for fighting fake news	76
2.5.2. Staff training to stop disinformation	77



# The impact of disinformation on the media industry in Spain and Portugal

2.5.3. Agreements with fact-checking platforms	78
2.5.4. Journalistic routines (clickbait, use of social networks)	79
2.5.5. How to get useful audience feedback to make better information	81
2.5.6. Economic benefits and ethics	82
2.6. Results of the interviews with Portuguese media editors	84
2.6.1. Introduction	84
2.6.2 Analysis of the responses	85
2.6.3 Conclusions	94
3. ETHICS PROCEDURES FOR THE TREATMENT OF EVALUATION DATA	97
4. Conclusions	98
5. Bibliography	101
6. Annexes	103
Annex 1. Media mentioned by participants in the Spanish survey as main	l
source of news (question 3)	103
Annex 2. Informed consent for the interviews with media editors	109
Anney 3 Consent form	113



# Table of figures

FIGURE 1. TRUST IN NEWS IN 2022 PER COUNTRY	10
FIGURE 2. POLITICAL POLARISATION OF THE MEDIA: PROPORTION OF INDIVIDUALS WHO	0
CONSIDER THAT THE MAIN NEWS ORGANISATIONS IN THEIR COUNTRY ARE POLITIC	ALLY
far apart, Europe, 2022	11
FIGURE 3. "IN THE LAST WEEK, HAVE YOU COME ACROSS FALSE OR PARTIALLY INCORF	RECT
INFORMATION ON ANY OF THE FOLLOWING TOPICS?" BY TRUST IN NEWS, PORTUG	AL,
2022 (MULTIPLE ANSWER)	12
FIGURE 4. EVOLUTION OF ADVERTISING INVESTMENT (ESTIMATED) (THOUSANDS €),	
Portugal, 2002 to 2021	13
FIGURE 5. EVOLUTION OF INVESTMENT IN ADVERTISING ACCORDING TO MEDIA AND YE	AR,
Spain, 2000 to 2020	13
FIGURE 6. EVOLUTION OF THE TURNOVER OF THE MEDIA SECTOR FROM 2016-2020,	
SPAIN	15
FIGURE 7. BREAKDOWN OF ADVERTISING INVESTMENT BY MEDIUM (ESTIMATED)	
(THOUSANDS OF €), PORTUGAL, 2002 TO 2021	16
FIGURE 8. EVOLUTION OF PAID PRINT AND DIGITAL CIRCULATION IN THE RELEVANT	
MARKET, PORTUGAL, 1996 TO 2021	17
FIGURE 9. PAYMENT FOR ONLINE NEWS IN THE PREVIOUS YEAR, INTERNATIONAL	
COMPARISON, 2022	18
FIGURE 10. GENDER OF PEOPLE INTERVIEWED	31
FIGURE 11. POSITION OF PEOPLE INTERVIEWED	31
FIGURE 12. PROFILE OF THE MEDIA WHERE THEY WORK	31
FIGURE 13. KIND OF MEDIA	31
FIGURE 14. REGULAR MEDIA CONSULTED BY CITIZENS TO BE WELL INFORMED	48
FIGURE 15. BARPLOT. VARIABLE: ITEM 4. (N = 616) FIGURE 16. PIEPLOT	50
FIGURE 17. BARPLOT. VARIABLE: [ITEM 5] WHAT KIND OF SOCIAL NETWORKS DO YOU	
BELIEVE SPREAD MORE HOAXES? (N = 616)	51
FIGURE 18. BARPLOT. VARIABLE: [ITEM 6] WHAT KIND OF MOBILE MESSAGING PLATFO	)RM
DO YOU BELIEVE SPREADS MORE HOAXES? (N = 616)	53
FIGURE 19. GROUPED BAR CHART. VARIABLE: ITEM 10, SEGMENTATION BY RESPONSE	Ξ
OPTION RANKING 1, 2 AND 3	58
FIGURE 20. FREQUENCY OF CONSULTING NEWS IN SOCIAL MEDIA	66



FIGURE 21. FREQUENCY WITH WHICH YOU CAME ACROSS DISINFORMATIVE CONTENT I	N
SOCIAL MEDIA (LAST MONTH)	67
FIGURE 22. TYPES OF MISINFORMATION IDENTIFIED IN SOCIAL MEDIA (LAST MONTH,	
MULTIPLE RESPONSE)	67
FIGURE 23. TOPICS ON WHICH INFORMATION WAS TOTALLY OR PARTIALLY FALSE (LAST	Γ
MONTH, MULTIPLE ANSWERS)	68
FIGURE 24. MEDIA USUALLY USED BY RESPONDENTS TO GET INFORMED	69
FIGURE 25. CONFIDENCE IN NEWS (DEGREE OF AGREEMENT WITH STATEMENTS)	70
FIGURE 26. CONCERN ABOUT POTENTIAL DISSEMINATORS OF MISINFORMATION (MULT	IPLE
RESPONSE)	71
FIGURE 27. CONCERN WITH ONLINE PLATFORMS THAT PROMOTE MISINFORMATION	
(MULTIPLE RESPONSE)	72
FIGURE 28. LOSS OF TRUST IN SOME MEDIA DUE TO FINDING DISINFORMATIVE CONTEN	IT <b>7</b> 2
FIGURE 29. MEDIA THAT RESPONDENTS STOPPED TRUSTING (OPEN ANSWER)	73
FIGURE 30. DISABLEMENT OF SOCIAL COMMUNICATION MEDIA AFTER BREACH OF TRUS	ST.
DUE TO FINDING UNINFORMATIVE CONTENT	74
FIGURE 31. SOURCES OF INFORMATION THAT RESPONDENTS TRUST MOST (UP TO 3	
OPTIONS)	75
FIGURE 32. ROBUST CORRELATION BETWEEN THE WORDS MOST USED BY INTERVIEWE	ES
	78
FIGURE 33. COMPARISONS BETWEEN KEYWORDS IN THE INTERVIEW CORPUS	82
FIGURE 34. ACTIVE PROTOCOLS ON FACT-CHECKING AMONG PORTUGUESE MEDIA	86
FIGURE 35. PERCEPTION OF PORTUGUESE MEDIA EDITORS ON THE DISSEMINATION OF	=
DISINFORMATION BY THEIR OUTLET	87
FIGURE 36. PERCEPTION ON THE JOURNALIST'S SKILLS AND TRAINING TO MITIGATE	
DISINFORMATION IN PORTUGAL	88
FIGURE 37. MOST FREQUENT WORDS WHEN ADDRESSING STRATEGIES REDUCE ATTRI	TION
AND IMPROVE QUALITY OF LIFE IN NEWSROOMS IN PORTUGAL	90
FIGURE 38. IDENTIFIED STRATEGIES TO SOLVE JOURNALISM FUNDING RELATED ISSUES	S IN



## Introduction on dis/misinformation's impact on Spain and Portugal media ecosystem

Portugal stands out as one of the countries whose citizens trust news the most and, simultaneously, one of the countries where people are most concerned about the veracity of information content circulating on the Internet. Spain, however, also stands out as one of the countries whose citizens have the least trust in the news. Spaniards' scepticism towards the media has been on the rise in recent years. Interestingly, however, they express greater trust in the media they personally follow than in the rest of the media ecosystem. The relationship of the Portuguese with news content and the media is complex, and the trust established depends not only on the consumption practices themselves, but also on the perception that individuals have of the structures in which information circulates.

In this sense, it is important to note that Portuguese audiences show behaviours characteristic of a society in communicational and informational transition where on the one hand television, as a traditional channel, continues to have a predominant role in the information diets and, on the other hand, Internet and social networks are also increasingly central in the daily informational dynamics – in 2022 television is the main source of news for 52% of the Portuguese, social networks for 19%, the Internet in general (excluding social networks) for 16% and the radio and press reach substantially lower levels of use, 7% and 3%, respectively. In this sense, the Spanish case presents characteristics of a society already advanced in this digital transition, where the most used news source by Spaniards is the Internet in general (excluding social networks) (79%), followed by television (59%), social networks (56%), printed press (26%) and radio (22%) (Newman et al., 2022). The data for Spain are also confirmed by the General Media Study (AIMC, 2022), which places media audiences according to media in the following order: Internet, including social networks (86.3%), television (79.1%), radio (53.8%), specialised magazines (21.7%) and the press (13.4%).

Considering only the access to news in digital format, it should be noted that 83% of accesses to news in digital format in Portugal occur in an indirect way, i.e., through ways other than direct access to the brands' websites - via search engines, social networks,



email, mobile notifications or aggregators. That is, in the broader context of media ecosystems, news brands compete directly with new digital structures, with, on the one hand, the primacy of editorialised content compromised against algorithmic content, and, on the other hand, the influence on news brands' monetization strategies of contents, which are now increasingly dependent and affected by the evolution of platformised structures. The migration of audiences to these structures results in a growing asymmetry between the media industry and platforms, increasing the dependence of the media on platforms and their power of distribution and audience reach.

The high interest for news content has proven to be one of the intrinsic characteristics of the relationship between the Portuguese and the media. In 2020 (Newman et al., 2020), 64% of respondents of the Reuters Institute Digital News Report said they were interested in news, and in 2021 (Newman et al., 2021) that proportion reaches 69%, almost 7 in every 10 Portuguese. However, in 2022, data from the same project indicate that the proportion of Portuguese declaring an interest in news falls to 51%, -18 percentage points regarding the previous year. The Portuguese report, which explores in depth the results of the survey applied in Portugal, identifies that this fall in interest occurs in Portuguese society in general, but it is more accentuated among the less educated and those with lower incomes (Cardoso et al., 2022).

In parallel, it is also registered in 2022 (Cardoso et al., 2022) an increase in the proportion of respondents who say they actively avoid news – 42% – an increase of 10 percentage points compared to 2019 (Cardoso et al., 2019) and 20 percentage points compared to 2017 (Cardoso et al., 2017), years in which this question was explored. Given the date of the 2022 survey fieldwork, between mid-January and February, saturation with news content is related to the excessive concentration of the media agenda on the Covid-19 and 2022 legislative elections, which took place on 30 January 2022. Among the reasons most indicated by the Portuguese for actively avoiding news is the existence of too much news on politics / Covid-19 (36.1%), tiredness with the excess of news (25.8%) and the negative impact that the news have on mood (20.2%).

In Spain, the number of citizens very interested in news has declined over the years. In 2015, 85% of Spaniards were very interested in news, but although this decline has been gradual, there are two annual ranges in which they lose about ten points from one year to the next. From 2019 to 2020, 76% of Spanish citizens were very interested in news, down to 69%; and from 2021 to 2022, from 67% to 55%. In other words, we are facing a population that is steadily losing interest in news (Vara Miguel, et al., 2022).

Following this line, and concerning trust in the news, are the data on those citizens who directly adopt an avoidant attitude towards information. In 2022, 69% of Spaniards have experienced the need to consciously avoid news on different occasions. Although only 10% say they often avoid them, this phenomenon is worrying for the democratic health of the country. It should also be noted that this attitude is positively correlated with low-income, low-educated citizens who do not know where they stand politically (Vara Miguel, et al., 2022).

The main reasons they give for this avoidance are that there is too much coverage of issues related to politics and the coronavirus (44%), that news have a negative influence on their mood (32%), that they are exhausted by the amount of daily news (30%) and distrust in the impartiality of the media (28%) (Vara Miguel, et al., 2022).



Further research conducted by the Reuters Institute for the Study of Journalism, as part of the Digital News Report 2022, in Brazil, Germany, Poland, the United Kingdom and the USA indicates that respondents in these countries are following the conflict closely in the news media, but are also actively avoiding news to a greater extent than before (Newman et al., 2022).

#### 1.1. Impact evaluation of dis/misinformation on people's trust

Following the report produced by Reuters, Digital News Report 2022, we find that the countries studied in this report, Spain and Portugal, are in very different positions regarding trust in news. For instance, 6 out of 10 Portuguese (61%) say they trust news in general (Newman et al., 2022), ranking only behind Finland (69%). In a general comparative framework in which the average value of trust in news for the 46 countries studied in the Digital News Report 2022 is 42%, Portugal stands out in a positive way compared to realities geographically close such as Spain (31%) or France (29%). Spain is at some of the lowest positions in this comparison, with only 3 out of 10 people trusting the news.

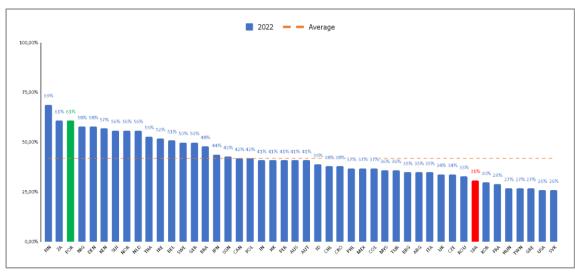


Figure 1. Trust in news in 2022 per country

Source: Reuters Digital News Report 2022. Edited by OberCom.

In the Eurobarometer Media Trust Index indicator (European Commission, 2022), Portugal also stands out as the country among the 27 in the European Union where more citizens say they have high trust in the media (40%). Spain appears as the 3<sup>rd</sup> country where fewer respondents say they have high trust in news (13%) only ahead of France (8%) and the United Kingdom (9%). Nevertheless, the media remain the primary source of trust for news consumption. Both Portugal and Spain give more credibility to the media (in this order: public TV and radio, print media, private TV and radio) than social media and other Internet platforms. In the case of Spain, citizens' trust in the written press (44%) and in private television and radio (36%) exceeds the European average (39% and 27%, respectively); but in the case of public television and radio, Spanish citizens trust less (45%) than the European average (49%) (European Commission, 2022).



Structurally high trust rates in media in Portugal have remained stable over the years, with a minimum value of 57%, recorded in 2020 (Newman et al., 2020) and a maximum value of 66%, recorded in 2015 (Newman et al., 2015). It should be noted, however, that trust rates in news in search engines and, above all, in social networks, are substantially lower. In 2021, 45% of the Portuguese say they trust news in search engines and 27% in news in social networks (Newman et al., 2021). Just as the Portuguese assign different levels of trust to different sources, regardless of their high trust in news in general, they also have different perceptions about the political and economic / commercial independence of the media.

In Spain, however, confidence in the news has been far from stable. The highest mark was achieved in 2017 (51%) and the lowest is currently at 2022 (32%). The fluctuation of Spaniards' trust in the news varies every year, and, since 2017, it has been on a downward trend (Vara Miguel et al., 2022). As for trust in other sources of information, Spaniards do not trust them as much as they trust the media. In 2020, trust in the media was 36%, while the use of social networks for information was 23%, and of news searched through Internet search engines was 32%. In 2021, trust in the media was 36%, trust in social networks 24% and trust in search engines 30% (Amoedo-Casais et *al.*, 2021).

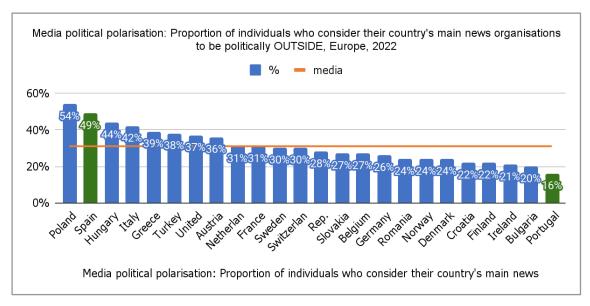
Despite this, it is also important to note that in Spain, trust in the media and other sources of information is always above the average, being 42% in 2020, 41% in 2021, and 38% in 2022 (Amoedo-Casais et *al.*, 2021; Vara Miguel et al., 2022).

The relationship between media and politics is always a determining factor for trust. The Portuguese who trust news tend to consider, to a greater extent, that the media are independent from political (47%) and economic / commercial influence (also 47%). Among those who say they do not trust the news, these proportions are substantially lower, on the order of 13% and 12% respectively (Newman et al., 2022). Spaniards' lack of trust in the news makes sense if we take into account their perception of media independence. 61% of Spaniards believe that in 2022 political groups will have an influence on the media, and 57% believe that business groups will also have an influence on the media (Vara-Miguel, 2022).

In fact, when asked about aspects related to the political polarisation of the media spectrum, Portugal stands out in the European framework as the country where people least consider that the media are politically distant (16%) and therefore more polarised (Cardoso, 2022). While if we look at the southern European countries, Spain leads the ranking. 49% of Spaniards consider the media to be polarised (Newman et al., 2022). In the European comparative framework, Portugal appears in the opposite position to Poland, Spain and Hungary, where 54%, 49% and 44% of respondents, respectively, consider that the media are politically distant.

Figure 2. Political polarisation of the media: Proportion of individuals who consider that the main news organisations in their country are politically far apart, Europe, 2022



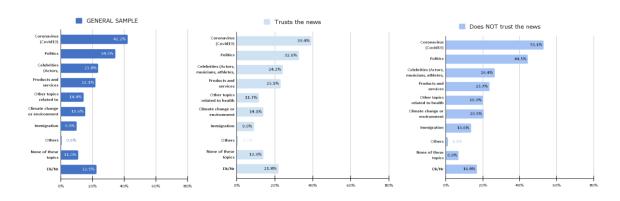


Source: Reuters Digital News Report 2022. Edited by OberCom.

Regarding the perception of misinformation in digital environments, 71% of the Portuguese say they are concerned about what is real and false on the Internet in 2022 (Cardoso et *al.*, 2022); whereas in Spain, surprisingly, these citizens represent 62% of the population. However, it should be noted that trust in news in general appears to motivate different perceptions about the genesis of the misinformative content that the Portuguese encounter. While in the Spanish case, despite their low trust in the media, there is a decreasing trend in the interest in knowing what is true and what is false, as in 2018 69% of the population was concerned and in 2022 it has dropped to 62% (Vara-Miguel et *al.*, 2022).

The Portuguese who do not trust the news tend to report, in higher proportion, having encountered misinformative content on Covid-19, politics, health in general, climate change or immigration than the Portuguese in general, and especially than the Portuguese who indicate trusting the news in general (Cardoso et al., 2022). In Spain, 71% of citizens claim to have encountered misinformation in 2022, a decrease of four points compared to 2021; the content of hoaxes deals with the same topics as those reported by the Portuguese (Vara-Miguel et al., 2022).

Figure 3. "In the last week, have you come across false or partially incorrect information on any of the following topics?" by Trust in news, Portugal, 2022 (multiple answer)



Source: Reuters Digital News Report 2022. Edited by OberCom.



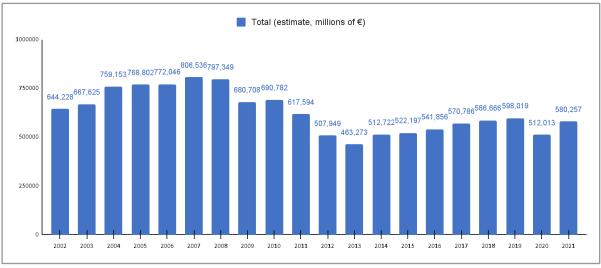
At the level of frequency with which interaction with disinformative content occurs, data from the 2022 Eurobarometer Media & News Survey (Eurobarometer, 2022) indicate that 28% of Portuguese say they have been exposed to disinformation or fake news in the previous week very often / frequently, i.e. the same proportion as Europeans in general, among the 27 countries of the Union and less than in Spain, where this percentage reaches 40%. However, in Portugal, Spain or the Union countries, the proportion of Eurobarometer respondents indicating that they are able to identify disinformation when they encounter it is quite similar - 66%, 66% and 64% respectively.

Additionally, complementary data from Eurobarometers 92 (European Commission, 2020) and 94 (European Commission, 2021) indicate that 93% of the Portuguese consider that disinformation is a problem for democracy in general (+20 percentage points than in 2020). However, the smallest proportion identifies disinformation as a problem in Portugal (80%), 85% say it is easy for them to identify disinformation when they encounter it and 89% say they come across disinformation content regularly. According to Eurobarometer 96 (European Commission, 2022), 82% of Spaniards agree that the circulation of false information is a problem for democracy.

#### 1.1.1. Impact evaluation of dis/misinformation on business media

The economic dynamics of the media ecosystem in Portugal and Spain is strongly dependent on the advertising market, which is the main source of revenue for most media brands. This landscape has led in recent years to a reduction of incomes, as, since 2008, it has been decreasing. This has especially affected traditional media (radio, written press and, although to a lesser extent, television) and has benefited digital media and new formats that have increased their revenues from online advertising.



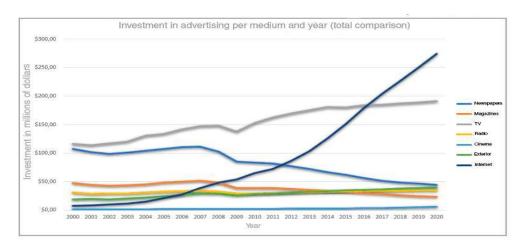


Source: Omnicom, Anuário da Comunicação 2021 OberCom. Edited by OberCom. Note: Unit - Thousands of €.

Figure 5. Evolution of investment in advertising according to media and year, Spain, 2000 to 2020



# The impact of disinformation on the media industry in Spain and Portugal



Source: AdBibiotech

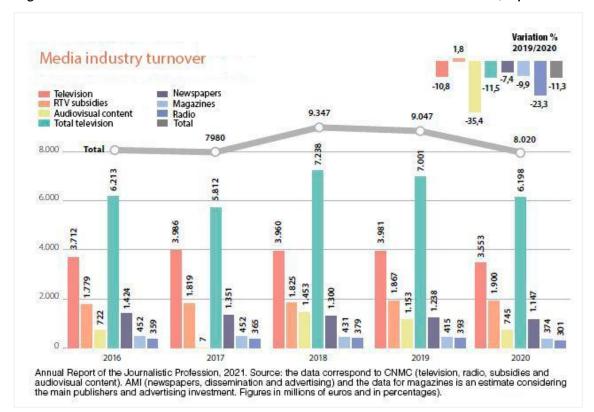


Figure 6. Evolution of the turnover of the media sector from 2016-2020, Spain

Source: Annual report of journalistic profession 2021. Press Association of Madrid. Unit: millions of €.

Over the last 20 years, there have been three distinct phases in the evolution of the Portuguese advertising market: the first one, a phase of growth, between 2002 and 2008, is interrupted by the economic and financial crisis; then begins the second one, a contraction phase, which lasts until 2013. This is followed by a third phase, also of growth, between 2014 and 2019, which is interrupted by the pandemic crisis that takes place in 2020 causing a contraction of the advertising market estimated around 14%, from € 586,019 thousand to € 512,013 thousand. It should be noted that the pandemic did not affect all sectors equally, being particularly damaging for cinema (54% drop in advertising investment between 2019 and 2020), press (39% drop) and radio (31% drop) sectors (Cardoso et al., 2021).

In terms of the relative weight of each sector, these dimensions are largely influenced by the relationship of the Portuguese with the different media, as described previously in the form of a great dependence on television, as the main medium, and the growing role of the Internet and the digital. Thus, advertising investment in TV represents 55% of the total investment, and the Internet 28%. In the case of Spain, the weight of TV is notable, as it represents 77% of the total income. The case of the radio is also significant, as it suffers a decrease of 23%. The evolution of the Portuguese advertising market has been particularly penalising for the press (daily and non-daily) and radio sectors. The press represents in 2021 only 2% of the total advertising investment, compared to 30% in 2002. In the case of the radio, this weight has remained in the same residual order over the years. As mentioned before, this reduction of the turnover of the Spanish media is highly influenced by the new competitors: while the media industry has reduced 10% its advertising investment since 2016, social media, influencers and search engines have increased them by 77%.



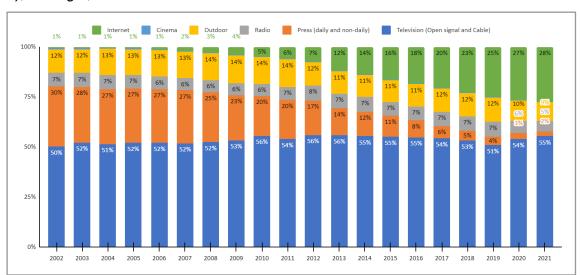


Figure 7. Breakdown of advertising investment by medium (estimated) (thousands of €), Portugal, 2002 to 2021

Source: Omnicom, Anuário da Comunicação 2021 OberCom. Edited by OberCom. Note: Unit - Thousands €.

Although many radio and press brands have found on the Internet and the digital new ways of monetising content, the digital arena is frankly more penalising for these sectors insofar as losing the ability to define distribution structures means a greater weight for the big digital platforms, namely Google, which holds the monopoly of indexing, and Facebook, which controls the landscape of digital sociability.

From the point of view of the health of the media sector, and the press and news brands in particular, the unsustainability of the current economy should be underlined: the sharp drop in paid print circulation, in paper, especially since the 2008 crisis, is in no way being offset by the increase in paid digital circulation, which remains residual in relation to the funding needs of journalism in Portugal.



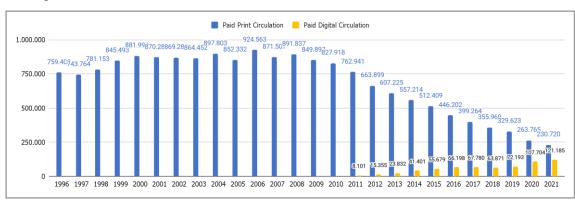


Figure 8. Evolution of paid print and digital circulation in the relevant market<sup>1</sup>, Portugal, 1996 to 2021

Source: APCT<sup>2</sup>. Edited by OberCom.

Portugal stands out, on the negative side in what concerns the adherence to the payment for news in digital format according to the Reuters Digital News Report comparative table, being one of the countries where less is paid for news in digital format.

Only 12% of respondents say they paid for news in digital format in the previous year, the same proportion registered in Spain or Italy. In a comparative table where the average is 17%, Portugal is in a situation opposite Norway (41%) and Sweden (33%). Anyway, according to the PWC report (2021), although digital subscriptions have increased by 26,1%, this amount only represents a 6% of income of mass media.

<sup>&</sup>lt;sup>2</sup> The sports newspaper A Bola does not disclose information regarding print-runs, paid circulation or total circulation. Sol and Jornal i do not report information regarding print-runs, paid circulation or total circulation since 2014 and 2015, respectively.



\_

<sup>&</sup>lt;sup>1</sup> The so-called relevant market comprises Público (1996 to 2020), Correio da Manhã (1996 to 2020), 24 horas (1998 to 2010), Jornal de Notícias (1996 to 2020), Diário de Notícias (1996 to 2020), Record (1996 to 2020), O Jogo (1996 to 2020), Jornal de Negócios (2003 to 2020), Diário económico (1996 to 2016), Oje (2006 to 2014), Vida Económica (1996 to 2020), Semanário Económico (1996 to 2010), O Jornal Económico (2015 to 2020), Courrier Internacional (2005 to 2020), O Crime (1996 to 2008), Tal & Qual (1996 to 2007), Expresso (1996 to 2020), O Independente (1996 to 2006), Sábado (2004 to 2020), Focus (1999 to 2011), Visão (1996 to 2020), Jornal i (2009 to 2014) and Sol (2006 to 2015).

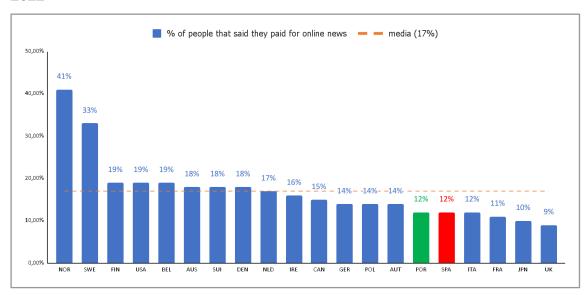


Figure 9. Payment for online news in the previous year, International comparison, 2022

Source: Reuters Digital News Report 2022. Edited by OberCom.

Also, Spain's media consumption (radio, press and television) has been gradually declining. According to a report from 2021, radio consumption time has gone from 105 minutes to 94. This drop is especially relevant if we differentiate between generalist radio, whose audience has gone from 34.2 in 1992 to 27.9 in 2020. This drop is even more pronounced in the case of television consumption, which has gone from an average of 239 minutes in 2004 to 209 minutes in 2020. It is clear that the emergence of the Internet and the new formats of communication have radically changed the structure of the media company, with new competitors that, despite being essentially different from the media (such as social networks or messaging platforms), have been used in this way. In the case of newspapers, the decrease is even more remarkable: in 1997, the penetration rate of newspapers was 37.7%. In 2020 this figure plummeted to 18.4%. This constant drop has been especially pronounced since 2008, when the historical maximum was reached.

This reduction of the media consumption and the competition against other platforms (on many occasions free of charge) have placed journalism in a difficult position as previously analysed.

The impact of the contraction of the media economy in Portugal and Spain has naturally had significant impacts on the working conditions of journalists. Through data collected in the context of the project "Are Portuguese Journalists Well Paid? Survey on the Working Conditions of Journalists in Portugal" (Cardoso et al., 2017b), and for the annual report of the journalistic profession (Madrid Press Association, 2021) we were able to obtain a detailed view of the constraints of journalistic production in Portugal and Spain.

Starting by addressing the weekly working hours of journalists in Portugal, it is important to highlight that 64.7% of individuals claim to have a work contract involving around 35 to 40 hours per week. However, when asked about the number of hours they actually work, 60.7% of respondents claim to work more than 40 hours per week. In addition, 81.9% of these individuals are not paid for overtime. In Spain, 62% of journalists say they work more than 40-hours per week. In fact, 26% say they work more than 45 hours per week. Thus, we find



a discrepancy between the real and contractual working hours, which does not usually translate into additional remuneration. In fact, when asked about which is the main problem of journalism, the most frequent answer is bad salaries.

An important aspect to consider in most jobs is the possibility of career progression. In Portugal, 80.3% of the respondents state that they have not progressed in professional terms in the last 4 years, and it should also be noted that 28.4% have not had any progression for more than 10 years. In general, progress in the field of journalism appears to be almost non-existent, with a high percentage of journalists not presenting any type of progress at a professional level.

Regarding job insecurity – an important aspect to consider in any professional situation – 39.2% of the respondents in Portugal state that they were momentarily unemployed during their career as journalists. However, 63.4% of these individuals were unemployed for less than a year. It is also relevant to mention that 40.9% of respondents consider it somewhat likely that they will be unemployed in the future, revealing the perception of some professional instability in the area of journalism.

With regards to the autonomy of journalists in Portugal in relation to the production of content it is perceptible that this is mainly conditioned by internal pressures and not by external ones. In other words, only 13.2% of respondents consider themselves to be not at all or not very autonomous in relation to political pressures and 9.5% in relation to pressures from information sources. In contrast, 31.5% of the respondents consider themselves as not at all or not very autonomous towards the management and 41% towards administrative decisions. In addition, journalists consider that their work activity is mainly conditioned by the agenda, the working conditions, their salary, the reconciliation of professional and personal life, and the bosses.

In Spain, 51% of journalists recognised to censor themselves "occasionally". Asked about the frequency of pressures, 48% say they receive them on some occasions. Inquired about who pressures them, most of them (57%) say it comes from media managers. For the 22% of journalists, pressures come mainly from press departments of companies with economic interests. Interestingly, 57% of spanish people consider, according to Digital News Report, that journalistic companies are not independent in the face of political and government (61%) or business (57%) pressures. Despite the precariousness of working conditions and the pressures, when asked about which is the main goal of journalistic work, 93% say "to truthfully inform society".

Finally, when addressing the satisfaction of journalists with their working conditions, it is notable that there is a general dissatisfaction regarding certain aspects. More specifically, 69.1% of respondents are relatively or extremely dissatisfied with their working conditions in the sector in the last 5 years, 53.3% with their career progression and 51.7% with their salary. Despite these levels of dissatisfaction, when asked about their general satisfaction with the profession of journalism, 43.2% said they were satisfied compared to 34.4% who were dissatisfied. Thus, it is perceptible that most journalists are satisfied with their profession, but largely dissatisfied with some constraints of their professional life.

The precarious working conditions of journalists and the difficulties in funding journalism, especially in platformised digital environments, affect not only the sustainability of the sector, but also the difficulty in maintaining the independence of journalistic work. In this aspect, the growing concern and centrality of disinformation phenomena have further



underlined the role of the media in dismantling and mitigating disinformation. As will be explained later in this same report, for many media managers, the disappearance of middle managers has also reduced the quality of the information since part of the internal correction work has disappeared.

Regardless of the constraints described above, it should be noted that in Portugal the media have shown a progressive interest in participating in the education of citizens regarding the phenomenon of disinformation, as well as in the dissolution of instances of false information.

Through initiatives and partnerships with other institutions, the media have sought to take advantage of their privileged position as reliable sources of information to have a greater impact in containing the spread of disinformation. Specifically, we can find in the main Portuguese television channels - RTP, SIC and TVI, different projects with the purpose of integrating these brands in the fight against disinformation.

Before addressing the projects assumed by the main television channels, it is important to highlight that the regulation of these media tends to integrate practices of disinformation containment. For example, in 2022, the ERC - Regulatory Entity for the Media - issued directive 1/2022 (ERC, 2022), a "good practice guide for television news coverage of wars and armed conflicts". This directive was promulgated mainly due to the Ukraine conflict, and addresses several coverage topics including some points on disinformation. More specifically, the ERC presents the following recommendations that relate to the containment of disinformation:

- "The possible exacerbation of the events through stories, images and/or sounds that markedly strengthen their emotional component should be carefully assessed and, when likely to affect their rational understanding, avoided."
- "In order to comply with the duty to inform with accuracy and impartiality, the media should diversify the sources of information and contextualise events."
- "Considering the difficulties in obtaining reliable information in times of war, the
  media should inform viewers of any uncertainties or indeterminacies that may arise,
  avoiding the broadcasting of unconfirmed facts and the propaganda of the parties
  to the conflict."
- "The dates, places and origin of the images shown, including archive images, must always be identified on screen, so as not to induce false perceptions in viewers and to meet the requirements of informational accuracy regarding the identification of sources of information."
- "The media should ensure the suitability and timeliness of images or speeches from official and unofficial information sources so as not to convey disinformation content."

Although directive 1/2022 is enacted by ERC and not by the media organisations, it tends to ensure the quality of information on the Ukraine conflict, and the consequent reduction of misinformation on the war in the main Portuguese media.

In what concerns initiatives and collaborations by the Portuguese media, it is possible to start by highlighting the initiative RTP Ensina<sup>3</sup>. This initiative arises through a collaboration with the General Directorate of Education - DGE, and is a complement to the education of 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> cycle and secondary school students. The RTP Ensina platform contains audiovisual content related to several relevant themes in the students' educational process.

<sup>&</sup>lt;sup>3</sup> RTP Ensina. Platform available at: https://ensina.rtp.pt/



ALPMJ, partner in IBERFIER, produced a series of media and journalism literacy explainers for teachers and students<sup>4</sup>.

Regarding disinformation, we found several videos aimed at 3<sup>rd</sup> cycle and high school students that address concepts such as disinformation itself, fake news, as well as "the truth, lies and manipulation on the Internet". The videos on disinformation can be found in the media education theme which includes content related to the promotion of digital literacy. In general, through a partnership with DGE, we observe RTP participating in the fight against disinformation through the promulgation of good practices in the online environment, presenting educational and quality information about the phenomenon of disinformation.

Regarding SIC, it is important to highlight its collaboration in the field of fact-checking with the fact-checker Polígrafo<sup>5</sup>, partner of IBERIFIER. Every Monday during SIC's "Jornal da Noite" (the prime-time news bulletin) there is a segment presented by Polígrafo whose purpose is to verify the veracity of popular content circulating in the media, on the Internet, and especially on social networks. Polígrafo analysis encompasses a final opinion in which the news or publication is categorised according to several degrees between true and false. In general, as highlighted by Obercom in 2020, SIC and Polígrafo "(...) find in this partnership the way to meet the needs of both players – SIC, getting specialised support in fact-checking, and Polígrafo, a recent project that can thus expose more effectively its work and inherent methodology" (p. 26).

Regarding TVI, we also find a fact-checking initiative through a partnership with the *Observador* newspaper. On TVI's "Jornal das 8" (8 o'clock news) there is a section called "Hora da Verdade" (The Hour of Truth)<sup>6</sup> where several popular news and publications in the Portuguese public sphere are analysed.

The partnerships of SIC and TVI - based on fact-checking - are especially relevant as they are the only two Portuguese media organisations that belong to the International Fact-Checking Network (IFCN). In this sense, both the Observador Newspaper<sup>7</sup> and the Polígrafo<sup>8</sup> have the IFCN information quality seals. These seals confirm that the institution in question is in agreement with the IFCN values, demonstrating: "impartiality and fairness, transparency of funding and organisation, transparency of methodology, and a commitment to open and honest corrections".

In the case of Spain, over the last 20 years several fact-checking initiatives have arisen as a response to society's demand for transparency (Esteban-Navarro et al. 2021). The main fact-checking companies in Spain are EFE-Verifica (from the Spanish news service EFE agency); AFP Factual (from the Agence France-Press); Maldita (founded as a non-profit initiative); Newtral (non-profit) and Verificat (non-profit agency acting in Catalonia). There are two main business models of fact-checking companies in Spain: those integrated into the media and, secondly, those promoted by journalists. At the same time, they offer their

<sup>8</sup> https://ifcncodeofprinciples.poynter.org/profile/observador-fact-check



<sup>4 &</sup>quot;Conteúdos sobre literacia para os media na RTP Ensina". Content available in: https://associacaoliteracia.pt/conteudos-sobre-literacia-para-os-media-na-rtp-ensina/

<sup>5</sup> https://poligrafo.sapo.pt/

<sup>6</sup> TVI Segment "Hora da verdade". Content available in: https://tviplayer.iol.pt/programa/hora-da-verdade/5f7fa87b0cf2ae07a253f644

<sup>7</sup> https://ifcncodeofprinciples.poynter.org/profile/poligrafo

services to three main clients: media companies, social media corporations and the general public. In Spain, this phenomena has gained social relevance even if many journalists and academics consider that the work fact-checkers do is the same as journalists do when they follow their ethical codes. Most belong to the International Fact-checking Network (IFCN), created by the Poynter Institute. The principles to adhere to the network are:

- A commitment to non-partisanship and fairness
- A commitment to Standards and Transparency of Sources
- A commitment to Transparency of funding and organisation
- A commitment to Standards and Transparency of methodology
- A commitment to an Open & Honest Corrections Policy

Following these principles, it was also created The Trust Project, another international initiative led by Santa Clara University in the USA to which belong the main journals in Spain (*El País*, *El Mundo*, *20 minutos*, among others). Even though journalistic routines include fact-checking, the crisis of credibility of media has promoted such initiatives as fake news destabilise the whole industry (Ufarte-Ruiz et al., 2018).

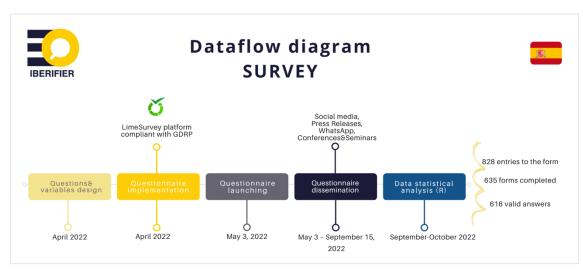
Those agencies have also developed educational programmes aimed at young people and students to promote media literacy. Some press associations in Spain (such as Málaga Press Association, Sevilla Press Association, among others). Fact-checking companies are also hired by digital companies and social media profiles so they can verify content posted by users or by other companies using their platforms.

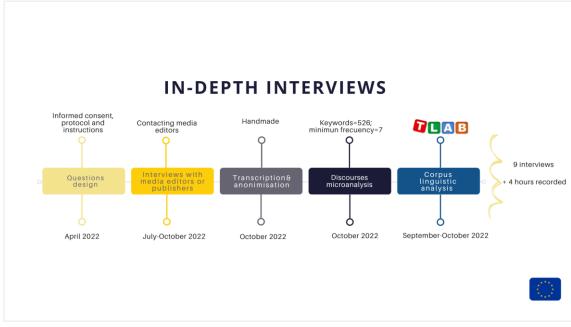
#### 2. Summary of the evaluation process

# 2.1. Impact dis/misinformation in Spain. Methodology general description

To reach the research objectives, it was agreed to carry out a survey aimed at the general audience and disseminated through the social networks, blogs and platforms of the IBERIFIER consortium in order to identify whether the spread of misinformation could directly impact media companies, causing some economic effect. The survey aims to reach those consumers of digital media. In addition, nine interviews were also conducted with editors and directors of media outlets to find out how disinformation influenced their media outlets.

#### 2.1.1. Methodology: flow diagram (quantitative and qualitative data)







#### 2.1.2. Survey (general audience)

With the data obtained from the online survey in Spain, a statistical study was carried out, which corresponds to the following points included in the report of results:

- 1. Descriptive of qualitative variables with frequency tables and percentages.
- 2. The figures for the visual analysis were made based on the objectives and methodology proposed in the study.
- 3. The crosses between nominal or ordinal variables are expressed from the contingency tables. Proportions and absolute and relative values are added for each of the crosses. The Chi-Square test is used to study the significance or non-significance of the crossings, and, depending on the size of the matrix, the Odd Ratio or Cramer's V (this subsection is explained in more detail in the following pages) is used to study the effect size.

In all inferential statistical tests, significance is considered when p-value < = .05 (usual 5% confidence level) and high significance when p-value < = .01 (n.c. 1%). Therefore, if p > .05, no significance will be concluded. In addition, the corresponding effect sizes are added in those tests that require it.

#### 2.1.3. Questionnaire design

Table 1. Questionnaire of the Spanish survey

Question	Nature of variable	Responses
ID of the question		ID of the response
[Item 1] 1. Could you tell me how often you consume information from journalistic media (traditional or digital press, radio, television, etc.)?	Categorical Multichotomo us	1. Never or almost never (if you answer this option the questionnaire ends) 2. Occasionally 3. On weekends 4. Two or three days a week 5. Four or five days a week 6. Every day or almost every day 7. Don't know / no opinion
[Item 2] 2. What media outlets do you think publish or broadcast the most misinformative content? Select up to 3 answers:  2.1. [Item 2.1.] Traditional newspapers 2.2. [Item 2.2.] Digital press 2.3. [Item 2.3.] Television 2.4. [Item 2.4.] Radio 2.5. [Item 2.6.] None 2.6. [Item 2.5.] Other media (specify which one)	Categorical Dichotomous	0. No 1. Yes



Ougation	Nature of	Dagnamasa
Question	variable	Responses
ID of the question  [Item 3] 3. Could you indicate up to three means by which you usually get information? For example, the name of some newspaper/s, radio station/s, television station/s, etc.  3.1. [Item 3.1] Medium 1  3.2. [Item 3.2] Medium 2  3.3. [Item 3.3] Medium 3	Textual data	ID of the response  Textual data (CATEGORISE) (5 columns: Original Answer, Adjusted, Joint Medium, Political Segment, Political Mean Affinity)
[Item 4] 4. In general, how much do you trust the information published by the media?	Categorical Multichotomo us	I fully trust it I half trust it, depending of the subject I trust it a little I never trust it Don't know / no opinion
5. [Item 5] What kind of social networks do you think spread more hoaxes? 5.1. [Item 5.1] Linkedin 5.2. [Item 5.2] Twitter 5.3. [Item 5.3] Instagram 5.4. [Item 5.4] YouTube 5.5. [Item 5.5] Reddit 5.6. [Item 5.6] Pinterest 5.7. [Item 5.7] Flickr 5.8. [Item 5.8] Facebook 5.9. [Item 5.9] TikTok 5.10. [Item 5.10] Nextdoor 5.11. [Item 5.11] Discord 5.12. [Item 5.12] Twitch 5.13. [Item 5.12] Twitch 5.14. [Item 5.14] I don't know 5.15. [Item 5.15] None 5.16. [Item 5.16]Does not know / no answer	Categorical Dichotomous	O. No 1. Yes



Question	Nature of	Responses
ID of the question	variable	ID of the response
6. [Item 5] What kind of social networks do you think spread more hoaxes? 6.1. [Item 5.1] Linkedin 6.2. [Item 5.2] Twitter 6.3. [Item 5.3] Instagram 6.4. [Item 5.4] YouTube 6.5. [Item 5.5] Reddit 6.6. [Item 5.6] Pinterest 6.7. [Item 5.7] Flickr 6.8. [Item 5.8] Facebook 6.9. [Item 5.9] TikTok 6.10. [Item 5.10] Nextdoor 6.11. [Item 5.11] Discord 6.12. [Item 5.12] Twitch 6.13. [Item 5.12] Twitch 6.14. [Item 5.14] I don't know 6.15. [Item 5.15] None 6.16. [Item 5.16] Does not know / no answer	Categorical Dichotomous	0. No 1. Yes
[Item 7] 7. And have you personally lost confidence in any media outlet for having published any fake news or hoax?  [Item 7a] 7.a. Could you tell me what medium it is? (Only if they have answered yes to question 7)	Categorical Multichotomo us Textual data	0. No 1. Yes 2. Don't know / no opinion  [Categorise] (4 columns: Original Answer, Adjusted, Joint Medium, Political
[Item 7b] 7.b And have you stopped using it or	Categorical	Segment) 0. No
[Item 8] 8. Do you think trust could be restored in a medium that at one time had published fake news?	Dichotomous Categorical Multichotomo us	1. Yes 0. No 1. Yes 2. Don't know / no opinion
[Item 9] 9. Answer your degree of agreement with this sentence.  "Means of payment provide information of higher quality and that can be trusted."	Likert scale 11 items	0 – Does not trust the information at all 1 2 3 10 – Fully trusts the information



Question	Nature of variable	Responses
ID of the question [Item 10] 10. In general, who do you trust the most when you receive information or try to find information about a subject?	Categorical Ranking	Ordinal selection 1, 2 and 3. Journalists Friends and acquaintances Close family and partner Influencers and celebrities Opinion leaders Doctors and pharmacists Researchers, scientists and experts Politicians Doesn't know / no answer
[Item 11] 11. When talking about politics, the expressions left and right are used. Where would you be on a scale of 0 to 10 where 0 represents people who are far to the left and 10 represents the people who are far to the right?	Likert scale 11 items	0 – Far to the left 10 – Far to the right
[Item 11a] Recategorisation of items (7 categories) (From response 11)	Categorical Multichotomo us	1. 0 – Extreme / far left 2. 1 – 2 Left 3. 3 – 4 Centre-left 4. 5 - Neutral 5. 6 – 7 Centre-right 6. 8 – 9 Right 7. 10 – Extreme / far right
[Item 11b] Recategorisation of items (5 categories)	Categorical Multichotomo us	1. 0 – Extreme / far left and 1 – 2 Left 2. 3 – 4 Centre-left 3. 5 – Neutral 4. 6 – 7 Centreright 5. 8 – 9 Right and 10 – Extreme/far right
[Item 11c] Recategorisation of items (3 categories)	Categorical Multichotomo us	1.0 – Extreme / far left and 1 – 2 Left 2. 3, 4, 5, 6, 7 – Centre (with possible tendencies)



		3. 8-9 Right and 10 Extreme / far right
Question	Nature of variable	Responses
ID of the question	Categorical	ID of the response  1. 0 – Extreme / far
[Item 11b2] Recategorisation of items (4 categories)	Multichotomo us	left and 1 – 2, 3 left 2. 4 Centre-left, 5- Neutral and 6 – Centre-right 3. 4. 7 – 8 - Right 4. 9 and 10 – Extreme/far right
[Item 12] Could you tell me which party or coalition did you vote for in the last Elections to the Cortes Generales on November 10, 2019?	Categorical Multichotomo us	PSOE PP Ciudadanos Unidas Podemos VOX ERC En Comú Podem JxCat EAJ-PNV EH-Bildu CC-PNC UPN Compromís PRC Other parties Blank vote Null vote I don't recall I didn't vote I didn't have the right to vote I don't want to answer
[Item 12A] Categorisation of political parties according to a scale extreme-left to extreme-right	Categorical Multichotomo us	1. Right, 2. With tendency to right or centre-right, 3. Centre, 4. With tendencies to left or centre-left and 5. Left
[Item 13] How old are you?	Categorical Multichotomo us	18 years to 24 years 25 years to 34 years 35 years to 44 years 45 years to 54 years 55 years to 64 years



		Older than 65 years
Question	Nature of variable	Responses
ID of the question	701.101.510	ID of the response
[Item 14] You identify as (Gender question)	Categorical Multichotomo us	1. Woman 2. Man 3. Non-binary
[Ítem 15] What are the highest official level studies you have completed (regardless of whether you have finished them or not)?	Categorical Multichotomo us	Less than 5 years of education Primary education ESO / Elementary Baccalaureate / School graduate Medium Grade Vocational Training Baccalaureate (LOGSE, BUP, COU) Higher Degree Vocational Training Architecture / Engineering Technician Diplomat Architecture / Higher Engineering Bachelor's degree Official Master's Degree Postgraduate studies (own titles) Doctorate
[Item 16] Please tell us the approximate number of people living in the city where you currently live:	Categorical Multichotomo us	Less than 10.000 inhabitants. From 10.001 to 20.000 inhabitants From 20.001 to 50.000 inhabitants From 50.001 to 100.000 inhabitants From 100.001 to 500.000 inhabitants More than 500.000 inhabitants



#### 2.1.4. Questionnaires' implementation on social networks

The survey aimed to reach a large and diverse population so that a wide range of opinions could be collected and different perspectives could be included in the questionnaire. For this reason, it was decided to carry out different forms of distribution of the survey, all digital, since the survey could be easily accessed. A short, easy-to-memorise, easy to access and clickable link was also created from all platforms (bit.ly/encuestalBERIFIER).

The questionnaire was launched through the Iberifier Project website, a press release from the Science Culture and Innovation Unit of the University of Valencia, and the ScienceFlows blog. It was also disseminated through the Twitter accounts of the Iberifier, ScienceFlows, and CdCiencia (Science Culture Unit) from the UVEG. It was also disseminated through ScienceFlow's Facebook and Instagram accounts.

In addition, researchers disseminated the survey with an explanation of the purposes through private messaging groups such as WhatsApp, as these proved effective in launching other research surveys.

On May 10, the survey was published at the same time that a press release was issued by the Science Culture Unit from the UVEG. The dissemination through institutional press releases was published in the University of Valencia website, social networks and local digital media. The title of the press release was: La Universitat estudia en España y Portugal la percepción ciudadana sobre los 'efectos secundarios' de la desinformación ('The University of Valencia studies in Spain and Portugal the citizen's perception of the 'secondary effects' of disinformation'). On the other hand, the piece of news was also published on the IBERIFIER website and the ScienceFlows blog. The survey link was always shared with an explanation of the IBIERIFIER project.

Furthermore, the research survey was disseminated through national and international seminars and conferences.

#### 2.1.5. In-depth interviews

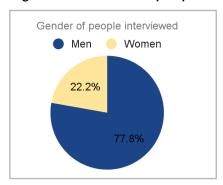
The members of the research team agreed upon the survey questions in the months prior to the beginning of the interviews. In addition, they agreed the informed consent for the participants which specified the commitment that their data would be anonymised. This social data collection technique was chosen to get qualitative and detailed information about the relationship between disinformation and communication industries.

#### 2.1.6. Selection of the media's editors and publishers

The team valued the selection of editors and media publishers as the professionals who could contribute the most to the research questions.

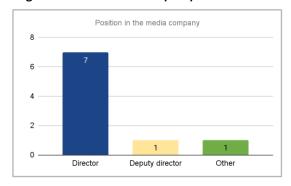


Figure 10. Gender of people interviewed



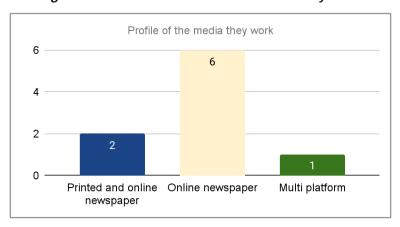
Source: Own elaboration.

Figure 11. Position of people interviewed



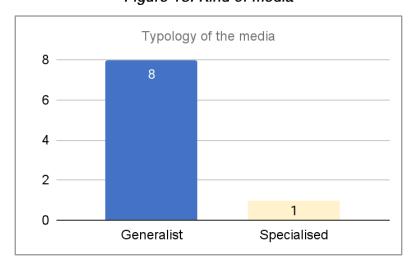
Source: Own elaboration.

Figure 12. Profile of the media where they work



Source: Own elaboration.

Figure 13. Kind of media



Source: Own elaboration.



#### 2.1.7. Questionnaire design

The basic questionnaire consisted of fifteen questions that were agreed upon by the work team. The objective was that all the interviews should deal with the same points to contribute to the debate and be able to compare the data obtained.

Table 2. Questions for Spanish media editors or publishers of media corporations

	Questions for Spanish media editors or publishers of media corporations
1	Does the media or publishing group have a <b>protocol</b> to deal with the publication of fake news?
2	Have the procedures for internal verification of journalistic content been strengthened?
3	Does this protocol include <b>debunking fake news</b> and, if necessary, publishing the contrasted story?
4	Does the newsroom receive <b>up-to-date training</b> on how to fight disinformation?
5	What recommendations do journalists follow for <b>verifying content</b> provided by direct and indirect sources?
6	Does the media or the publishing group have any agreements with <b>fact-checking platforms</b> to guarantee the veracity of the information sources?
7	Do you consider the possibility that journalists, using social networks as sources of information, may have promoted the dissemination of more misinformation?
8	Could you quantify the <b>economic benefits</b> that would be generated by the dissemination of links with clickbait for the audience?
9	What feedback do you receive from the audience when clickbait content has increased? and is the company willing to avoid this content?
10	Could you tell us about the <b>economic benefits</b> of any fake news published in your media or publishing group?
11	Don't you think that in the long term, the dissemination of fake news could harm your media or publishing group? For example, don't you think it could affect reducing the subscriber's numbers?
12	Do you discuss at any time the ethics of journalistic content and the right of citizens to receive <b>truthful information</b> from the public?

Questions for Spanish media editors or publishers of media corporations				
13	What <b>criteria</b> do you adopt regarding clickbait content? and what <b>tools</b> do you use to prevent it from appearing in the main sections or headlines?			
14	When it comes to the publication and analysis of data, are <b>data analysis</b> experts available to check the statistical reliability of the analyses carried out?			
15	Do you think the unstableness of <b>journalists' conditions working</b> may affect the quality of the news generated and the production process?			

#### 2.1.8. Recording of interviews

Of the nine interviews, seven were conducted online, one in person and one via email. All interviews were recorded and subsequently transcribed. Prior to the recording of the interviews, participants were informed of the purpose of the interviews, and it was specified that they would be anonymised so that they would not be identifiable. All interviewees signed the informed consent form (see Appendix 2).

# 2.2. Impact dis/misinformation in Portugal. Methodology general description

The methodology applied in Portugal follows similar principles to that used in Spain, i.e. a dual approach aimed at understanding the perception of news consumers / audiences and editors and directors of the media.

The quantitative survey was applied to the general public, being disseminated through the Iberifier social networks, by the IBERIFIER partners Polígrafo and Agência Lusa, and also in the personal networks of IBERIFIER researchers in Portugal. The aim of the survey is to identify the extent to which consumers perceive the scope of disinformation and what impact this disinformation has on the media ecosystem, namely in terms of consumer confidence. In this way, it is important to underline that we are talking about a sample formed exclusively by Internet users and that it is defined as a non-probabilistic sample for convenience.

Simultaneously with this far-reaching quantitative exercise, the interviews with the directors and editors of the media aim to make known how disinformation and disinformation phenomena are understood from the point of view of supply, how they impact communication and also what mechanisms the news media are developing to mitigate the phenomenon.



#### **Dataflow diagram SURVEY** IBERIFIER Social Media ress Releases WhatsApp qualtrics 649 entries to the form 535 forms completed Questionnaire launching Questionnaire dissemination Data statistical analysis (SPSS) 530 valid answers Ò Ò September 19, 2022 September-September 19 - October April 2022 September 2022 October 2022 **IN-DEPTH INTERVIEWS** Categorisation and aggregation of common proposals Identification of Informed consent Contacting media editors trint protocol and instructions tendencies and alternative proposals Transcription& anonimisation 11 hours recorded April 2022 September September October 2022 September-October 2022 October 2022 October 2022

#### 2.2.1. Methodology: flow diagram (quantitative and qualitative data)

#### 2.2.2. Survey (general audience)

With the data obtained from the online survey in Spain, a statistical study was carried out, which corresponded to the following points included in this report of results:

- 1. Descriptive of qualitative variables with frequency tables and percentages.
- 2. Figures for the visual analysis were based on the objectives and methodology of the hypotheses proposed in the study.
- 3. The crosses between nominal or ordinal variables are expressed from the contingency tables. Proportions and absolute and relative values were added for each of the crosses. The Chi-Square test was used to study the significance or non-significance of the crossings, and, depending on the size of the matrix, the Odd Ratio or Cramer's V (this subsection was explained in more detail in the following pages) was used to study the effect size.

In all inferential statistical tests, significance was considered when p-value < = .05 (usual 5% confidence level) and high significance when p-value < = .01 (n.c. 1%). Therefore, if p > .05, no significance will be concluded. In addition, the corresponding effect sizes were added in those tests that required it.



### 2.2.3. Questionnaire design

Table 3. Questionnaire of the Portuguese survey

Question	Nature of variable	Responses
ID of the question		ID of the response
A1. Please indicate your age:	Open answer, textual data	
A1 Recoded. Please indicate your age:	Categorical ordinal	1. 18 to 24 years 2. 25 to 34 years 3. 35 to 44 years 4. 45 to 54 years 5. 55 to 64 years 6. 65 and older
A2. Please indicate your gender:	Nominal	<ol> <li>Male</li> <li>Female</li> <li>Non-binary / third gender</li> <li>Prefer not to say</li> </ol>
A3. Please indicate the approximate annual net income of your household:	Categorical ordinal	1. Up to €9,999 / year 2. €10,000 to €19,999 / year 3. €20,000 to €29,999 / year 4. €30,000 to €39,999 / year 5. €40,000 to €49,999 / year 6. €50,000 to €59,999 / year 7. €60,000 to €69,999 / year 8. €70,000 or more / year 9. I don't know / prefer not to answer



Question	Nature of variable	Responses
A4. What is the highest level of education you completed?	Categorical ordinal	1. PhD or higher (Ex. Post-doctoral) 2. Master's 3. Degree 4. High School / Polytechnic 5. Secondary Education (12 <sup>th</sup> year, former 7 <sup>th</sup> year of high school) 6. Current 9 <sup>th</sup> year of high school) 7. Current 6 <sup>th</sup> year (former 2nd high school year) 8. Complete primary education 9. Incomplete primary education 10. Graduate
B1. How often do you consult news in social media (paper or online press, news sites, radio, television, etc.)?	Categorical ordinal	<ol> <li>Never or almost never</li> <li>Once a week</li> <li>Two or three times a week</li> <li>Four or five times a week</li> <li>Every day or almost every day</li> <li>Don't know / no answer</li> </ol>
B2. Considering the previous month, how often did you come across content that you classify as disinformation in the media (print or online press, news websites, radio, television, etc.)	Categorical ordinal	1. Several times a day 2. Four or five times a week 3. Two or three times a week 4. Once a week 5. Less than once a week 6. Two or three times in the last month 7. Never 8. Don't know / no answer



Question	Nature of variable	Responses
B3. Looking back over the past month, which of the following types of misinformation have you identified? Select all that apply.  B3.1. News where facts are PARTIALLY manipulated for political/commercial purposes B3.2. News COMPLETELY faked for political/commercial purposes B3.3. Poor quality journalism (factual errors, glibly covered stories, misleading headlines/clickbait) B3.4. Use of the term "fake news" (e.g. by politicians, others) to discredit media they don't like B3.5. Headlines that look like news but are advertisements B3.6. Articles with humorous purposes that read like news (satire) B.3.7. None of these B3.8. Don't know / no answer	Categorical dichotomous	1. No 2. Yes
B4. In the last month, have you come across completely or partially false information about any of the following subjects? Select all that apply B4.1. Policy B4.2. Celebrities (e.g. actors, musicians, athletes) B4.3. Covid-19 / pandemic B4.4. Other health-related matters B4.5. Immigration B4.6. Products, goods, services B4.7. Climate change and environment B4.8. Issues about economics and finance (e.g. inflation, economic crisis) B4.9. Ethnic-racial issues B4.10. Wars and armed conflicts (e.g. Invasion of Ukraine) B4.11. Others B4.12. None of these B4.13. Don't know / no answer	Categorical dichotomous	1. No 2. Yes



Question	Nature of variable	Responses
B5. Indicate the means of social communication that you usually use to get information (it can be printed or online press, news websites, radio, television, etc.)  B5.1. RTP1 B5.2. RTP2 B5.3. RTP3 B5.4. SIC B5.5. SIC Notícias B5.6. TVI B5.7. CNN Portugal B5.8. Público B5.9. Diário de Notícias B5.10. Jornal de Notícias B5.11. Portal Sapo B5.12. Expresso B5.13. Correio da Manhã B5.14. Correio da Manhã B5.14. Correio da Manhã B5.15. Notícias ao Minuto B5.16. Observador (website or radio) B5.17. Notícias ao Minuto B5.18. TSF B5.19. Antena 1 B5.20. Rádio Renascença B5.21. Outro B5.22. Don't know / no answer	Categorical dichotomous	1. No 2. Yes
B6. Considering news and social media in general, how much do you agree with the following statements  B6.1. NEWS can be trusted most of the time  B6.2. MEDIA CAN BE TRUSTED MOST OF THE TIMES  B6.3. JOURNALISTS CAN BE TRUSTED MOST OF THE TIMES  B6.4. News ON SOCIAL NETWORKS can be trusted most of the time  B6.5. News can be trusted IN SEARCH ENGINES most of the time	Likert scale 6 ítems	1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Totally agree 6. Don't know / no answer



Question	Nature of variable	Responses
B7. I am concerned about false information disseminated by (select all that apply) B7.1. Government, politicians or NATIONAL political parties B7.2. INTERNATIONAL governments, politicians or political parties B7.3. Journalists or media B7.4. Social media commentators B7.5. Family, friends, acquaintances, colleagues, etc. B7.6. Individual activists or activist movements B7.7. I am not concerned with information coming from these sources. B7.8. Don't know / no answer	Categorical dichotomous	1. No 2. Yes
B8. I am concerned about false information being disseminated in (select all that apply)  B8.1. Social networks (eg Facebook, Twitter, Instagram, YouTube)  B8.2. Social media websites or apps  B8.3. Search Engines (Ex. Google or Bing)  B8.4. Instant Messaging Apps (Ex. WhatsApp, Telegram)  B8.5. I am not concerned with information coming from these sources.  B8.6. Don't know / No answer	Categorical dichotomous	1. No 2. Yes
B9. Did you stop trusting any media because you found content that you consider false or disinformation in that medium?	Categorical dichotomous	1. No 2. Yes
B9.1. Can you specify the medium/media in question?	Resposta aberta, dados textuais	Categorise under analysis
B9.2. Did you stop using this medium or stop following their profile on social networks?	Categorical dichotomous	1. No 2. Yes
Question	Nature of variable	Responses



B10. Which of the following sources do you trust the most when receiving information or finding out about a topic? (select UP TO 3 options) B10.1. Journalists B10.2. Friends and acquaintances / work or school colleagues B10.3. Relatives B10.4. Commentators (radio, television, print newspapers, online media, etc.) B10.5. Celebrities and/or influencers on social media B10.6. Activists (e.g. environmental, labour, identity causes) B10.7. Doctors or other healthcare professionals B10.8. Scientists / experts B10.9. Politicians or rulers of my country B10.10. Politicians or rulers of other countries	Categorical dichotomous	1. No 2. Yes
B11. When talking about politics, we usually refer to expressions like "left" and "right". Where would you place yourself, on a scale of 1 to 7, where 1 means "far left" and 7 means "far right"?	Likert scale 8 items	1. Far left 2. Relatively left 3. Slightly left of centre 4. Centre 5. Slightly right of centre 6. Relatively right 7. Far right 8. Don't know / no answer

## 2.2.4. Questionnaires' implementation on social networks

The questionnaire, available on the Qualtrics platform, is available for completion between September 19, 2022 and October 19, 2022. The first phase of dissemination to the general public was promoted in the IBERIFIER social networks and shared by researchers associated with the Portuguese IBERIFIER partners. The researchers produced their posts and shared the survey and project weekly. The researchers also sought to promote the sharing of the survey among respondents, so the survey was shared via email, social media and messaging apps by others.

The fact-checker Polygraph also shared the survey on the Facebook network, and the LUSA Agency prepared a news story about the project and the survey, which was, in turn, reported by some national media outlets.



### 2.2.5. In-depth interviews

The interview script was elaborated based on the initial joint proposal with the IBERIFIER partners. However, it was decided to adapt it to the specificity of the national media reality and context relevance due to the relevant differences between the media ecosystems of Portugal and Spain. The script in Portuguese contemplates four essential topics: disinformation, precariousness, trust, financing and business model.

The topic of disinformation comes first, as it is the main axis of the research. The choice of the remaining areas in exploration resulted from an evaluation duly considered by the research team that took into account, among other aspects, the contextual relevance to the phenomenon of disinformation.

The panel of interviewees comprised editors in the generalist or specialised media of national scope, directors and editors of regional or local media from North to South of the continent and Autonomous Regions. To guarantee the sample diversity, differentiated media were selected in terms of the leading platform (press, radio, television or online) and included professionals from both traditional media and media considered innovative, either in terms of journalistic approach or business models.

All interviewees were given space to present their perspectives on the news media presence and share their experiences, concerns and worries. In any case, for the present analysis, we privileged the speech focused on specific aspects and the measures they would like to see implemented. The team validated the questionnaire and followed cross-checking procedures in coding and applying analytical categories.

## 2.2.6. Selection of the media editors and publishers

The first common and obligatory criterion is the professional position of the person interviewed as an editorial leader (director, other members of editorial management or editor) of Portuguese media organisations.

The first step was to select editorial directors representing a sample of the news sector in Portugal. The aim was then to define a representative sample of the diversity that characterises the national panorama, following three differentiation criteria between media organisations for which the interviewees are responsible for editorial responsibility: diversity of scope, focus/specialisation and territorial coverage (national, regional or local).

The sample, therefore, included editorial directors of:

- 1. Generalist national TV, radio, print and online media organisations;
- 2. News agencies;
- 3. Specialised thematic media (e.g. economy, business etc.);
- 4. Local, regional or other territorial/geographical specialisation.

The sample included editors-in-chief of public and private organs from different regions of mainland Portugal and islands, belonging to several business groups. Based on these criteria, 20 editorial directors were pre-selected, contacted and invited. A total of 17 valuable responses were obtained, resulting in 17 interviews that were valid for this research.

The directors and editors who responded to the IBERIFIER team's request signed an informed consent form beforehand, which allowed for data processing on an individual and



anonymous media basis. This also guaranteed the complete freedom of the respondents and minimised any potential inhibition in speaking openly or the possibility of giving politically correct answers.

Given the objective of the interviews – to obtain the view of editorial decision-makers regarding their activity – the socio-demographic data collection was considered irrelevant, given that the sample size (n=17) would not allow any statistical analysis or add nothing to the purpose of the interviews, with one exception. Although socio-demographic data is not relevant in defining the sample, the pre-selection (n=20) is equitable concerning the gender of the respondents. The sample of respondents contains 53% women, which is not representative of the average composition of the editorial boards in the country.

# 2.2.7. Questionnaire design

The interview script included ten questions organised into four thematic areas of relevance: disinformation (D); precariousness and labour issues (P); trust in journalism (C); funding and business models (F).

The first four refer to disinformation issues, and the remaining ones, in blocks of two, to labour issues, audience trust and funding, respectively.

Table 4. Questions for Portuguese media editors of media corporations

No	Questions	Theme area
1	Does your media outlet or publishing group have a protocol to deal with the eventual publication of fake news? Do you have verification systems in place to correct or change questionable content?	D
2	Do you consider the hypothesis that journalists have already spread disinformation because they used social networks as their main sources?	D
3	In recent years, have verification procedures been strengthened? In what situations do you decide to update or deny fake news?	D
4	Does the newsroom have up-to-date training on how to combat disinformation? If so, internal or external?	D
5	What changes can be made to working conditions to improve the quality of journalistic work?	Р
6	What do you suggest to improve the stability of teams and the quality of newsrooms?	Р
7	Despite being stable and higher than in most countries, the confidence of the Portuguese in journalism and the media may be at risk. What reasons do you identify to justify the confidence of the Portuguese in the media?	С
8	How should journalism be differentiated from other content, whether informative or non-informative, on social networks or search engines? What measures can be taken?	С



No	Questions	Theme area
9	What do you consider to be the main current problems and challenges of the media business in terms of economic sustainability?	F
10	What do you consider essential to develop the business of your medium/media group? a) More advertising, other revenues and B2B business models, such as sponsored content, b) subscriptions and individual funding (crowdfunding, patrons, etc.), c) public funding (how?) or d) private funding (grants, specific projects). What do you consider to be the main current problems and challenges of the media business in terms of economic sustainability?	F

In order to carry out semi-structured interviews with media editors, a feasible format was developed, adapting it to the research demands and interviewees in terms of the duration and simultaneity of the interview, as well as methods and data collection techniques..

All interviewees were given prior access to the interview script and informed consent to allow for further information gathering and clarification to inform the articulation of their responses. The written informed consent and the introduction to the interviews contained preliminary information and a guarantee of the total anonymisation of persons, media and any information that may be recognisable or lead to the interviewee or media, seeking to ensure that genuine responses are obtained and not influenced by internal or external pressures.

The ethical code of conduct adopted in the research included the possibility of review and replication by the interviewees (no request was received) and the decision, in the written results, not to present cross-references between excerpts or identify the interviewees quoted.

### 2.2.8. Recording of interviews

All interviews were conducted remotely. The main technique was conducting and recording interviews using video conferencing tools. Alternatively, interviewees could choose to respond via recorded voice messages on the WhatsApp application or in written format via email. In both options, the interviewee had previously been instructed to respond to each question via a voice message/written paragraph.

All documentation, questions and answers were sent via the private email and mobile phone numbers of both the researchers and the interviewees. The collected data are stored in an archive accessible exclusively to the researchers of the Portuguese team, in compliance with the Portuguese legislation on data protection (RGPD).

The interviews were conducted between 1 September and 15 October 2022. They were all conducted outside the respondents' working hours, by a joint decision of the interviewees and the researchers.

The interviews were transcribed verbatim with the help of the Trint software. Despite the different formats of the collected data, it was possible to standardise the corpus and perform



a qualitative-quantitative content analysis by classifying common elements and comparing differences.

## 2.3. Results of the Spain online survey

## 2.3.1. Initial frequency analysis

The frequency tables are presented below, with the absolute and absolute cumulative frequency and the relative and relative cumulative frequency for each variable under study.

Table 5: Table of frequencies. General Descriptive. Items 1 and 2

Survey variables (N = 635)	Absolut e fre.	Accumul ated Aabs. fre.	Relati ve fre.	Accumul ated rel. fre.
1. Could you tell me how	often you	consume ii	nformatic	n from
journalistic media (traditio	nal or digi	ital press, r	adio, tele	evision,
	etc.)?			
<ol> <li>Never or almost never</li> </ol>	16	16	2.5%	2.5%
2. Occasionally	42	58	6.6%	9.1%
3. On weekends	4	62	.6%	9.8%
4. Two or three days a week	21	83	3.3%	13.1%
5. Four or five days a week	37	120	5.8%	18.9%
6. Every or almost every day	513	633	80.8%	99.7%
7. Doesn't know / no answer	2	635	0.3%	100.0%
2. What media outlets do yo	ou think pu	ublish or br	oadcast	the most
misinformative con	tent? Sele	ect up to 3	answers	
Traditi	onal news	papers		
0. Not selected	436	436	70.7%	70.7%
1. Selected			29.3	
1. Selected	181	617	%	100.0%
	Digital pres	ss		
0. Not selected	148	148	24%	24%
1. Selected	469	617	76%	100.0%
	Televisior	7		
0. Not selected	251	251	40.7%	40.7%
1 Calcated			59.3	
1. Selected	366	617	%	100.0%
	Radio			
0. Not selected	485	485	78.6%	78.6%
1 Calcatad			21.4	
1. Selected	132	617	%	100.0%
None				
0. Not selected	610	610	98.9%	98.9%
1. Selected	7	617	1.1%	100.0%
	Other			
0. Not selected	485	485	78.6%	78.6%
1 Calastad			21.4	
1. Selected	132	617	%	100.0%

Source: own elaboration.

The first question of the questionnaire was a filter question whose objective was to gather opinions only from people who consume information in the news media. Thus, the vast



majority of respondents (97.2%) stated that they consumed journalistic information at least occasionally. Only 2.5% said they never consumed it. Those who chose this answer were taken directly to the questionnaire end so that the rest corresponded only to people who consumed journalistic information to some degree.

Concerning the second question, which media did respondents perceive as the ones that disseminated the most disinformation? For 76%, it was the digital press, followed by television (for 59.3% of respondents) and traditional newspapers (29.3%). These data are similar to those offered by the Eurobarometer on news and media of 2022. In the case of Spain, the most trusted media (behind public information media) was the written press (Eurobarometer, 2022). Regarding the 21.4% of users who opted for the "other" option, it is noteworthy that most of them included social networks.

Table 6. Item 2.6

Survey variables (N = 617)	Frequency SUM	Frequency SUM	Frequency (n = 617)
2.6 What media outle misinformativ	<del>-</del>	nk publish or br Other (specify w	
Blogs	2	1.52%	0.32%
Other*	20	15.15%	3.24%
Social networks	98	74.24%	15.88%
All	4	3.03%	0.65%
Disinformation websites	8	6.06%	1.30%
Total amount	132	100,00%	21.39%

Source: Own elaboration. The category "other" includes answers that, instead of giving specific answers, offered descriptors (such as "press founded by lobbies" or "webs related to the government, etc".

Table 7: Frequency table. General description. Item 3 [3.1, 3.2 and 3.3]

Survey variables (N = 322)	Absolute fre.	Accumul ated abs. fre.	Relative fre.	Accum ulated rel. fre.	
3. Could you indicate up to three means through which you usually get information? For example, the name of some newspaper/s, radio station/s, television station/s, etc.					
They provide information Medium 1					
0. No	1	1	0.2%	0.2%	
1. Yes	616	617	99.8%	100.0%	
They provide information Medium 2					
0. No	14	14	2.3%	2.3%	



1. Yes	602	616	97.7%	100.0%
They provide information Medium 3				
0. No	72	72	11.7%	11.7%
1. Yes	544	616	88.3%	100.0%

Table 8. List of the 10 private media in order of frequency.

	Media		SUM of Frequency SUM
1	El País	Written press	223
2	Cadena SER	Radio station	152
3	<u>eldiario.es</u>	Digital press	153
4	La Sexta	Television	83
5	Antena 3	Television	64
6	El Mundo	Written press	56
7	Público	Digital press	60
8	Onda Cero	Radio station	39
9	El Confidencial	Digital press	33
10	Infolibre	Digital press	31

Source: own elaboration.

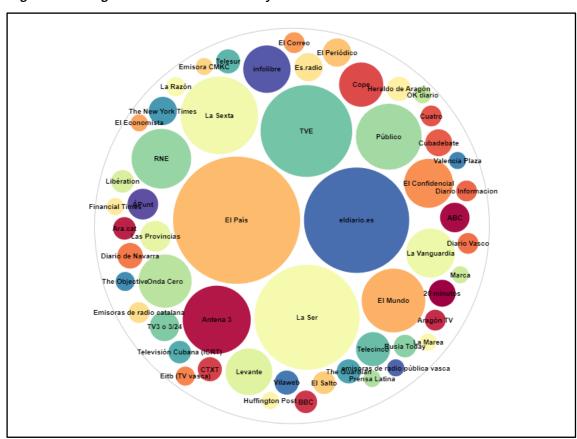
Table 9. Public media cited

Public media					
Spanish	Spanish public corporation of TV and radio				
	TVE (television)*	116			
RTVE	RNE (radio)*	49			
	RTVE	11			
Catalan	public corporation of TV and ra	adio			
ССМА	TV3 or 3/24 (television)*	12			
	Radio stations (radio)*	6			
Valencia	Valencian public corporation of TV and radio				
RTVV	ÀPunt (radio+TV)	13			
Basque public corporation of TV and radio					
EITB	Eitb (TV)	5			
	radio stations (radio)	4			
Aragon	public corporation of TV and ra	dio			
CARTV	Aragón TV	6			
Galician pu	blic corporation of radio and tel	evision			
CRTVG	TVG (TV)	1			
	Radio Galega (radio)	1			
Canarian public corporation of radio and television					



RTVC	TV Canaria (TV)	2				
Asturian pul	Asturian public corporation of radio and television					
RTPA	TPA	1				
Andalusian p	ublic corporation of radio and	l television				
RTVA	Canal Sur Radio	1				
Balearic pub	olic corporation of radio and t	television				
EPRTVIB	IB3 Radio	1				
Barcelona pu	ıblic corporation of radio and	television				
Ayuntamient o Barcelona	BETEVE	1				

Figure 14. Regular media consulted by citizens to be well informed



<sup>&</sup>lt;sup>9</sup> These public corporations have more than one TV channel or radio station. They have been all recorded in a generic way as on most occasions they were mentioned by participants in the survey in a generic way



-

Source: own elaboration. Created with RAWGraphs 2.0

The third question aimed to delve into the media that respondents usually use to access information. More than 200 media were recorded (the complete list can be consulted in Annex 1). Other sources of information, although not strictly speaking media, were included by users (for example, social networks or search engines). Table 8 shows the private media most frequently mentioned. Concerning the private media most consulted to access information, we find that the newspaper *El País* and the radio station Cadena SER belong to the PRISA communication group. These media tend to fall within the progressive and left wing, which coincides with the profile of most survey participants according to the self-perception scale included in the survey. In addition, they are also the media that lead the audience rankings. In third place, we find eldiario.es, a media that emerged as a digital newspaper and defines itself as independent of business groups, banks or institutions. In fourth and fifth place, we find two television stations: Antena 3 and La Sexta, two private channels with the largest audience and both belonging to the Atresmedia media group (Barlovento Comunicación, 2022).

Those public media cited were included in a separate table since they were mentioned with different names, and we combined them to avoid ambiguities. For example, when they referred to Televisión Española, it was mentioned both as TVE and TVE1 (which refers to the first channel of public radio and television), as TVE2 (the second channel) or simply as TVE, without specifying which of the two is being referred to. In addition, other users directly mention RTVE, which also includes public radio in any of its five stations. The same happens with regional public radio and television corporations with more than one channel in the same medium. For this reason, all the options have been grouped as radio or television of the corporation, and when the corporation is mentioned, the generic name has been maintained.

Regarding the public channels, national public television is mentioned 116 times as a regular source of information, which places it ahead of the aforementioned private television channels. In this regard, other studies, such as the Eurobarometer on Media and News (2022), point out that public broadcasters are the most trusted by the population (in the case of Spain, 45% of respondents say they trust public media more).

Table 10: Frequency table. General description. Item 4.

Survey variables (N = 322)	Absolute fre.	Accumulat ed abs. fre.	Relative fre.	Accumulat ed rel. fre.
4. In general, how much do you trust the information published by the media?				
1. I fully trust	25	25	4.1%	4.1%
2. I half trust, depending of the subject	462	487	75%	79.1%
3. I trust a little	104	591	16.9%	95.9%
4. I never trust	25	616	4.1%	100.0%

Source: own elaboration.

One of the survey's key points is to be found in the questions related to trust in the media. Thus, when asked how much they trust the information published by the media, the majority



of those surveyed (75%) said they trusted it "half-heartedly", depending on the subject in question. Only 4.1% say they trust entirely, and the same percentage say they never do. In short, respondents tend to trust "little bit" or "depending on the topic".

Figure 15. Barplot. Variable: Item 4. (N = 616)

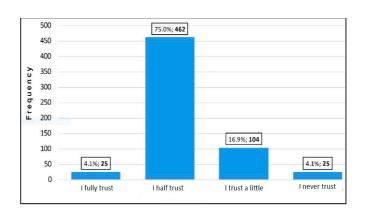
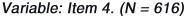
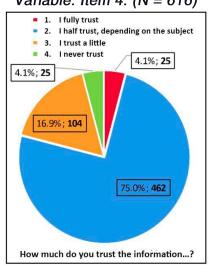


Figure 16. Pieplot.





Source: own elaboration.

Table 11: Frequency table. General Descriptive. Item 5 [5.1 – 5.15]

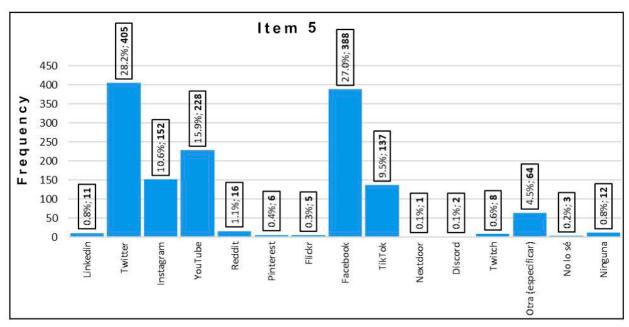
Survey variables (N = 616)	Absolute fre.	Accumul ated abs. fre.	Relative fre.	Accumul ated rel. fre.		
Question 5 - What kind of s			ı believe sp	oread more		
hoaxes? select a maximum	hoaxes? select a maximum of 3 answers					
LinkedIn						
0. Not selected	605	605	98.2%	98.2%		
1. Selected	11	616	1.8%	100.0%		
Twitter						
0. Not selected	211	211	34.3%	34.3%		
1. Selected	405	616	65.7%	100.0%		
Instagram						
0. Not selected	464	464	75.3%	75.3%		
1. Selected	152	616	24.7%	100.0%		
YouTube						
0. Not selected	388	388	63%	63%		
1. Selected	228	616	37%	100.0%		
Reddit						
0. Not selected	600	600	97.4%	97.4%		
1. Selected	16	616	2.6%	100.0%		
Pinterest						
0. Not selected	610	610	99%	99%		
1. Selected	6	616	1%	100.0%		



Flickr					
0. Not selected	611	611	99.2%	99.2%	
1. Selected	5	616	0.8%	100.0%	
Facebook					
0. Not selected	228	228	37%	37%	
1. Selected	388	616	63%	100.0%	
TikTok					
0. Not selected	479	479	77.8%	77.8%	
1. Selected	137	616	22.2%	100.0%	
Nextdoor					
0. Not selected	615	615	99.8%	99.8%	
1. Selected	1	616	0.2%	100.0%	
Discord					
0. Not selected	614	614	99.7%	99.7%	
1. Selected	2	616	0.3%	100.0%	
Twitch					
0. Not selected	608	608	98.7%	98.7%	
1. Selected	8	616	1.3%	100.0%	
0. Don't know					
0. Not selected	552	552	89.6%	89.6%	
1. Selected	64	616	10.4%	100.0%	
None					
0. Not selected	613	613	99.5%	99.5%	
1. Selected	3	616	0.5%	100.0%	
0. Don't know / no answer					
0. Not selected	604	604	98.1%	98.1%	
1. Selected	12	616	1.9%	100.0%	

Figure 17. Barplot. Variable: [Item 5] What kind of social networks do you believe spread more hoaxes? (N = 616)





The mobile messaging platforms that the surveyed population considers to spread the most hoaxes are WhatsApp (78.6%), Facebook Messenger (29.5%) and Telegram (28.7%). The positioning of these three platforms is the same as that observed in another study on the use of social networks (IABSpain, 2022). In other words, there may be a relationship between the popularity of use by citizens and their identification with the circulation of disinformation. In addition to these three platforms, some people identify the other networks asked about in the study as sources of disinformation. However, the percentage of responses to each is less than 4%.

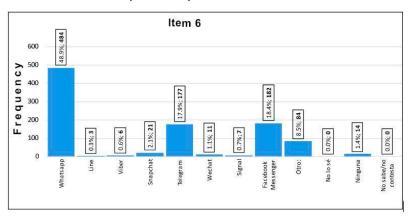
Table 12: Frequency table. General descriptive. Item 6 [6.1 – 6.12]

Survey variables (N = 322)	Absolute fre.	Accumul ated abs. fre.	Relative fre.	Accumula ted rel. fre.
Question 6 - What	kind of mo	bile messa	ging platfo	orm do you
believe spreads mor	e hoaxes? S	Select a ma	ximum of 3	answers
WhatsApp				
0. Not selected	132	132	21.4%	21.4%
1. Selected	484	616	78.6%	100.0%
Line				
0. Not selected	613	613	99.5%	99.5%
1. Selected	3	616	0.5%	100.0%
Viber				
0. Not selected	610	610	99.0%	99.0%
1. Selected	6	616	1.0%	100.0%
Snapchat				
0. Not selected	595	595	96.6%	96.6%



1. Selected	21	616	3.4%	100.0%
Telegram				
0. Not selected	439	439	71.3%	71.3%
1. Selected	177	616	28.7%	100.0%
WeChat				
0. Not selected	605	605	98.2%	98.2%
1. Selected	11	616	1.8%	100.0%
Signal				
0. Not selected	609	609	98.9%	98.9%
1. Selected	7	616	1.1%	100.0%
Facebook Messenge	r			
0. Not selected	434	434	70.5%	70.5%
1. Selected	182	616	29.5%	100.0%
0. Don't know				
0. Not selected	532	532	86.4%	86.4%
1. Selected	84	616	13.6%	100.0%
None				
0. Not selected	616	616	100.0%	100.0%
1. Selected	-	-	-	-
0. Don't know / no ar	iswer			
0. Not selected	602	602	97.7%	97.7%
1. Selected	14	616	2.3%	100.0%
Other				
0. Not selected	626	626	100.0%	100.0%
1. Selected	-	-	-	-

Figure 18. Barplot. Variable: [Item 6] What kind of mobile messaging platform do you believe spreads more hoaxes? (N = 616)



Source: Own elaboration.

62% of the people surveyed said they had lost confidence in a media outlet because it had published fake news or hoaxes. Of this group of people, 77.2% had also stopped following the media outlet on social networks. The opposite is the case for 23.7% of the surveyed population, who deny having lost confidence in a media outlet despite having published misinformation. When asked about the possibility of recovering the trust lost in a media outlet that published wrong information, 56.7% of those surveyed answered that they would not be able to recover it. In comparison, 25.8% would give it a chance.



Table 13: Frequency table. General descriptive. Items 7,7b and 8.

Survey variables (N = 322)	Absolute fre.	Accumul ated abs. fre.	Relative fre.	Accumula ted rel. fre.
Have you personally lost	confidence	e in any me	ans of com	munication
because they have published some fake news or hoaxes?				
0. No	146	146	23.7%	23.7%
1. Yes	382	528	62%	85.7%
2. Don't know / no				
answer	88	616	14.3%	100.0%
Have you stopped usir	ng them of	r following	them thro	ugh social
networks as a result of it	!? (N = yes)	answers)		
0. No	87	87	22.8%	22.8%
1. Yes	295	382	77.2%	100.0%
Do you believe that conf	idence cou	ld be recov	ered in a m	nedium that
published fake news at s	some point	?(N = all)		
0. No	349	349	56.7%	56.7%
1. Yes	159	508	25.8%	82.5%
2. Don't know / no				
answer	108	616	17.5%	100.0%

When asked whether the media paywall offered higher quality information and could be trusted, the highest percentage of the population surveyed was in the medium range (23%). The fact that the media has a paywall does not indicate that its content will be of higher or lower quality. If we group the percentages of those who responded leaning towards lack of trust (spectrum 0-4), we find 42.3% of the surveyed population. While the grouping towards trust in the media because it is paid for (spectrum 6-10) represents 34.8%. In other words, in general, there was a greater tendency towards scepticism.

Table 14: Frequency table. General descriptive. Item 9.

Answer with your degree of agreement with this sentence. "Pay means provide greater quality and trustworthy information". Where 0 means s/he does not trust the information at all, despite being paid, and 10 means s/he fully trusts the information when it is published on a pay medium.

	Absolute fre.	Accumulat ed abs. fre.	Relative fre.	Accumulat ed rel. fre.
0 - does not trust	104	104	16.4%	16.4%
1	26	130	4.1%	20.5%
2	45	175	7.1%	27.6%
3	57	232	9.0%	36.5%
4	36	268	5.7%	42.2%
5	146	414	23%	65.2%
6	65	479	10.2%	75.4%
7	69	548	10.9%	86.3%
8	48	596	7.6%	93.9%
9	32	628	5.0%	98.9%



# The impact of disinformation on the media industry in Spain and Portugal

10 - fully trusts	7	635	1.1%	100.0%
10 rany tracto	•	000	111/0	1001070

Source: own elaboration.

Trust varied according to the actors providing the information. When asked whom respondents trust the most, they were given the option of answering up to three questions. As a first choice, 62.2% (n = 616) preferred researchers, scientists and experts; as a second choice, doctors and pharmacists (29.3%; n = 536); and as a third choice, journalists (31.2%; n = 382).

Table 15: Frequency table. General descriptive. Item 10 [10.1, 10.2 and 10.3]

Survey variables (N = 616)	Absolute fre.	Accumul ated abs. fre.	Relative fre.	Accumul ated rel. fre.
In general, who do you trust the r	nost when	you receive	e information	on or try to
get informed on a topic?				
Ranking 1				
1. Journalists	118	118	19.2%	19.2%
2. Friends and acquaintances	19	137	3.1%	22.2%
3. Close family and partner	35	172	5.7%	27.9%
4. Influencers and celebrities	-	172	-	27.9%
5. Opinion leaders	16	188	2.6%	30.5%
6. Doctors and pharmacists	29	217	4.7%	35.2%
7. Researchers, scientists and				
experts	383	600	62.2%	97.4%
8. Politicians	1	601	.2%	97.6%
9. Don't know / no answer	15	616	2.4%	100.0%
Ranking 2				
1. Journalists	123	123	22.9%	22.9%
2. Friends and acquaintances	35	158	6.5%	29.5%
3. Close family and partner	52	210	9.7%	39.2%
4. Influencers and celebrities	-	210	-	39.2%
5. Opinion leaders	43	253	8.0%	47.2%
6. Doctors and pharmacists	157	410	29.3%	76.5%
7. Researchers, scientists and				
experts	120	530	22.4%	98.9%
8. Politicians	5	535	.9%	99.8%
9. Don't know / no answer	1	536	.2%	100.0%
Ranking 3				
1. Journalists	119	119	31.2%	31.2%
2. Friends and acquaintances	35	154	9.2%	40.3%
3. Close family and partner	66	220	17.3%	57.6%
4. Influencers and celebrities	3	223	.8%	58.4%
5. Opinion leaders	47	270	12.3%	70.7%
6. Doctors and pharmacists	51	321	13.4%	84.0%
7. Researchers, scientists and				
experts	49	370	12.8%	96.9%
8. Politicians	8	378	2.1%	99.0%
9. Don't know / no answer	4	382	1.0%	100.0%

If we analyse the choices in the aggregated by combining the responses from the three rankings, we find that journalists come in second place this time, as they were selected as one of the top three reliable sources 58.4% of the time. Researchers, scientists and experts are, in the first place, being chosen by 89.6% of the surveyed population, and doctors and pharmacists are in third place, chosen by 38.5%. Influencers and celebrities stand out negatively, with 99.5% of the surveyed population not selecting them as a source of trust;



politicians, who are not selected by 97.7% of the population as a source of quality information; and opinion leaders, who were not chosen by 82.8% of the population.

Table 16: Frequency table. General Descriptive. Item 10 [10.1, 10.2 a

Survey variables (N = 616)	Absolute fre.	Accumul ated abs. fre.	Relative fre.	Accumul ated rel. fre.
1. Journalists				
1 <sup>st</sup> option	118	118	19.2%	19.2%
2 <sup>nd</sup> option	123	241	20.0%	39.1%
3 <sup>rd</sup> option	119	360	19.3%	58.4%
They do not select it	256	616	41.6%	100.0%
2. Friends and acquai	ntances			
1 <sup>st</sup> option	19	19	3.1%	3.1%
2 <sup>nd</sup> option	35	54	5.7%	8.8%
3 <sup>rd</sup> option	35	89	5.7%	14.4%
They do not select it	527	616	85.6%	100.0%
3. Close family and pa				
1 <sup>st</sup> option	35	35	5.7%	5.7%
2 <sup>nd</sup> option	52	87	8.4%	14.1%
3 <sup>rd</sup> option	66	153	10.7%	24.8%
They do not select it	463	616	75.2%	100.0%
4. Influencers and cele				
1 <sup>st</sup> option	0	0	0%	0%
2 <sup>nd</sup> option	0	0	0%	0%
3 <sup>rd</sup> option	3	3	.5%	.5%
They do not select it	613	616	99.5%	100.0%
5. Opinion leaders				, , , , , , , , , , , , , , , , , , , ,
1 <sup>st</sup> option	16	16	2.6%	2.6%
2 <sup>nd</sup> option	43	59	7.0%	9.6%
3 <sup>rd</sup> option	47	106	7.6%	17.2%
They do not select it	510	616	82.8%	100.0%
6. Doctors and pharma			<u> </u>	
1 <sup>st</sup> option	29	29	4.7%	4.7%
2 <sup>nd</sup> option	157	186	25.5%	30.2%
3 <sup>rd</sup> option	51	237	8.3%	38.5%
They do not select it	379	616	61.5%	100.0%
7. Researchers, scien			3 / 0	
1 <sup>st</sup> option	383	383	62.2%	62.2%
2 <sup>nd</sup> option	120	503	19.5%	81.7%
3 <sup>rd</sup> option	49	552	8.0%	89.6%
They do not select it	64	616	10.4%	100.0%
8. Politicians			, •	
1 <sup>st</sup> option	1	1	.2%	.2%
2 <sup>nd</sup> option	5	6	.8%	1.0%
3 <sup>rd</sup> option	8	14	1.3%	2.3%
They do not select it	602	616	97.7%	100.0%
9. Don't know / no ans		· •		
1 <sup>st</sup> option	15	15	2.4%	2.4%
2 <sup>nd</sup> option	1	16	0.2%	2.6%
3 <sup>rd</sup> option	4	20	0.6%	3.2%
They do not select it	596	616	96.8%	100.0%
		<u> </u>	55.575	

Source: own elaboration.



For the question, In general, who do you trust the most when you receive information or try to get informed on a topic? We presented the results according to the order or ranking of responses, by selection preference, recorded.

As an initial note, it should be noted that the sample sizes vary for each option or record (ranking 1, 2 and 3). This is because the design of the data collection instrument itself "forced" the respondent to select at least one option, which is why in some cases, options 2 and 3 were not selected and therefore not recorded, hence the differences in the sample.

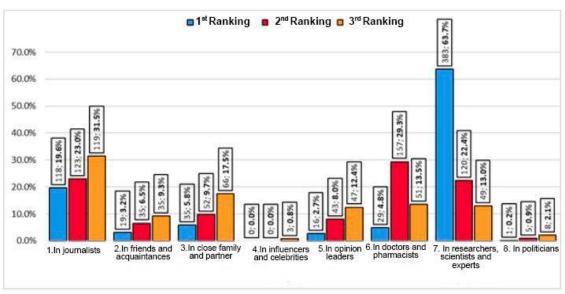
Concerning the first response option, we observed that one category stands out above the rest: high confidence in receiving information or when trying to obtain information on a given topic resides in variable 7. That is, in researchers, scientists and experts, 62.2% (383 out of 616) selected this option; in second place, but with a relative record lower by more than three times, were journalists, with 19.2% (118); the rest of the information agents presented values lower than 6.0% (less than 40 observations), highlighting among those who trust family and acquaintances, where only 5.7% (35) selected them as the first option.

For the second selection, with a sample register of 536, 3 responses were obtained with a response interval between 20-30%; those indicated variable 6. Doctors and pharmacists (29.3%, 157 out of 536), and variable 1. Journalists (22.9%, 123); and 7. Researchers (22.4%, 120).

Finally, for the third option in the ranking of responses (observational count of 382 responses), we obtained that response option 1.

By way of clarification, although we focused on the overall observational count in the following section, we present Figure 19 which allows us to observe and analyse the observational counts and the number of responses recorded for each information agent according to the selection ranking.

Figure 19. Grouped bar chart. Variable: Item 10, segmentation by response option ranking 1, 2 and 3



Source: own elaboration



As readers can see, the previous selection in the ranking of an option prevents it from being selected again, i.e. attention to give results or comment as a conclusion that the second most selected response option was option 1 (journalists) without taking into account the ranking in which we find ourselves.

Table 17: Frequency table. General descriptive. Item 11

Survey variables	Absolute	Accumulated	Relative fre.	Accumulate			
(N = 616)	fre.	abs. fre.	nelative ire.	d rel. fre.			
When talking abou	ut politics,	the expression	s left and rig	ght are used.			
Where would they l	be placed o	n a scale of 0 to	10 where 0 r	epresents the			
people who are far	people who are far left and 10 represents the people who are far right?						
0	53	53	8.3%	8.3%			
1	31	84	4.9%	13.2%			
2	99	183	15.6%	28.8%			
3	139	322	21.9%	50.7%			
4	95	417	15%	65.7%			
5	94	511	14.8%	80.5%			
6	36	547	5.7%	86.1%			
7	33	580	5.2%	91.3%			
8	26	606	4.1%	95.4%			
9	21	627	3.3%	98.7%			
10	8	635	1.3%	100.0%			

Source: own elaboration.

The 65.67% identify themselves ideologically on the left (between values 0 and 4), which corresponds to their voting memory (around 68% of those surveyed said they voted for parties located on the left ideological spectrum). At the same time, the percentage of users who identify themselves in the centre (comprising centre-left, centre-right), which would correspond to positions 4, 5 and 6, amounts to 35.59%. That self-placed in the right-wing ideological spectrum amounts to 16.54%. These data show that the responses do reflect Spanish society since, compared with the data from the CIS barometer of September 2022, the population tends to identify itself to a greater extent on the left than on the right, as shown in the CIS barometer of September 2022 (29.5% of those surveyed by the CIS place themselves on the right, compared with 39.8% who identify themselves on the left).

Table 18: Frequency table. General descriptive. Variable: Item 12.

Survey variables (N = 322)	Absolu te fre.	Accu mulat ed abs. fre.	Relati ve fre.	Accum ulated rel. fre.
Could you tell me which party or coalition did you vote for in the latest general Elections on November 10, 2019?				
01. PSOE	150	150	24.4%	24.4%
02. PP	27	177	4.4%	28.7%
03. Ciudadanos	29	206	4.7%	33.4%
04.Unidas Podemos	159	365	25.8%	59.3%
05. VOX	22	387	3.6%	62.8%
06. ERC	10	397	1.6%	64.4%
07. En Comú Podem	9	406	1.5%	65.9%
08. JxCat	3	409	.5%	66.4%
09. EAJ-PNV	7	416	1.1%	67.5%
10. EH Bildu	6	422	1.0%	68.5%
12. UPN (Navarra Suma)	3	425	.5%	69.0%
13. Compromís	31	456	5.0%	74.0%
15. Other parties	31	487	5.0%	79.1%
17. Blank vote	18	505	2.9%	82.0%
17. Null vote	11	516	1.8%	83.8%
18. I don't recall	8	524	1.3%	85.1%
19. I did not vote	41	565	6.7%	91.7%
20. I did not have the right				
to vote	8	573	1.3%	93.0%
21. I don't want to answer	43	616	7.0%	100.0 <u>%</u>

Voting recollection coincides, as mentioned above, with ideological self-placement. Concerning vote recall, there is an over-representation of respondents who claimed to have voted for Podemos, as this party obtained 13% of the votes. In comparison, in the IBERIFIER survey, it is the political party with the highest rate of vote recall (25.04%). Concerning vote recall for the socialist party. This party obtained the highest percentage of votes. The IBERIFIER survey has a 23.78% vote recall (in the 10N elections, it obtained 28.3%). The parties to the right and centre-right (Ciudadanos, PP, VOX) in the survey obtained 12.28% of the vote, compared to 43.1% in the general elections. From this perspective, the under-representation in the survey of the population with ideological affinity to the right is once again confirmed.



Table 19: Frequency table. General descriptive. Demographic character variable. Items 13, 14, 15 and 16.

Survey variables (N = 616)	Absolute fre.	Accumul ated abs. fre.	Relative fre.	Accumul ated rel. fre.		
How old are you?						
1. 18 to 24 years	38	38	6.2%	6.2%		
2. 25 to 34 years	46	84	7.5%	13.6%		
3. 35 to 44 years	74	158	12%	25.6%		
4. 45 to 54 years	149	307	24.2%	49.8%		
5. 55 to 64 years	173	480	28.1%	77.9%		
6. 65 years and over	136	616	22.1%	100.0%		
	ify as GE					
1. Woman	290	290	47.1%	47.1%		
2. Man	324	614	52.6%	99.7%		
3. Non-binary	2	616	.3%	100.0%		
What are the highest official level s				dless of		
whether you have finished them or not)?						
01. Less than 5 years of education	1	1	.2%	.2%		
02. Primary education	3	4	.5%	.7%		
03. ESO / elementary Baccalaureate /						
school graduate	19	23	3.1%	3.7%		
04. Medium grade vocational training	11	34	1.8%	5.5%		
05. Baccalaureate (LOGSE, BUP, COU)	45	79	7.3%	12.8%		
0.6. Higher degree vocational training	39	118	6.3%	19.2%		
07. Diplomat	56	174	9.1%	28.3%		
08. Architecture / higher engineering	29	203	4.7%	33.0%		
0.9 Bachelor's degree	202	405	32.8%	65.9%		
10. Official Master's Degree	73	478	11.9%	77.7%		
11. Postgraduate studies (own titles)	38	516	6.2%	83.9%		
12. Doctorate	99	615	16.1%	100.0%		
Please tell us the approximate number of people living in the city where you						
currently live:						
1. Less than 10.000 inhabitants	59	59	9.6%	9.6%		
2. From 10.001 to 20.000 inhabitants	47	106	7.6%	17.2%		
3. From 20.001 to 50.000 inhabitants	68	174	11.0%	28.2%		
4. From 50.001 to 100.000 inhabitants	68	242	11.0%	39.3%		
5. From 100.001 to 500.000 inhabitants	137	379	22.2%	61.5%		
6. More than 500.000 inhabitants	237	616	38.5%	100.0%		

Concerning the demographic variables recorded through the instrument used, Table 19:

• Age/How old are you?: The most significant number of observations recorded were found in the older age strata, specifically the 55 to 64 years old segment recorded a total of 28.1% (173) of the observations, followed by the 45 to 54 years old interval (24.2%, 149) and, in third place, the over 65 years old with a total of 22.1% (131) of the sample. 74.4% of the registers or respondents claim to be over 45 years of age. Most of the responses correspond to people over 45 years of age, which is surprising given that this is not the profile with the best handling of the digital media and platforms used to promote the survey. Young people under 25 have responded to the survey to a lesser extent, only 6.15%.



- Gender: relatively evenly distributed between women (47.1%, 290) and men (52.6%, 324). Only two observations were recorded for non-binary gender, representing 0.3% of the total sample. Gender data of the people who participated in the survey confirm that, although there is a more significant presence of men than women, the proportion is close to 50%, so the representativeness is satisfactory.
- Level of studies: Variable with very atomised records in some response categories, with sample sizes between 5-10%, of which Bachelor's Degree stands out with 32.8% (202) of the sample, followed by Doctorate with 16.1% (99). For this variable, it would be recommended in future studies to regroup by similarity, for example, ESO or Less, to include intermediate vocational training with Baccalaureate, etc.
- City size: The response option that collected the most records corresponds to those habitats with more than 500,000 inhabitants, where 38.5% (237) of the population responded that they belong to one of them, followed by the option of between 100,001 and 500,000, with 22.2% (137). We found that around 61.7% of the responses corresponded to people who lived in cities between 100,001 and 500,000 or more than 500,000. So we could say that 3 out of 5 observations or respondents belonged to habitats in cities with more than 100,001 inhabitants.



# 2.4. Results of the Portugal online survey

#### 2.4.1. Introduction

The IBERIFIER survey applied online to a sample of Portuguese Internet users gathered 530 valid answers. The sample of respondents, although not representative of the population (see methodology), allows us to explore the Portuguese's perceptions on the misinformation issue, especially among those who are aware of the phenomenon and voluntarily contributed to the debate on the topic by answering this questionnaire.

In this way, it is essential to consider that the results analysed below are based on a non-probabilistic convenience sample. This aspect is considered when interpreting them, and throughout the analysis, other data and reflections are presented, highlighting this sample's particularities.

Looking at the table below, we can compare the socio-demographic characteristics of the Portuguese (gender, age, education, income and political positioning) according to three different sources. The first is INE - *Instituto Nacional de Estatística*, in particular, the *results for the Censos 2021*, which generally represent the Portuguese population<sup>10</sup>. The second is the Reuters Digital News Report (DNR) Portugal 2022 sample<sup>11</sup>, which is representative of the Internet user's population and is, therefore, the closest to that sought to be portrayed in this survey. Finally, we have the characteristics of the sample consulted within the scope of this Iberifier survey of Internet users. It is on this sample that the analysis of results will focus on.

<sup>11</sup> Reuters Institute for the Study of Journalism, Reuters Digital News Report 2022. Available at: https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2022



\_

<sup>10</sup> Instituto Nacional de Estatística, Censos 2021. Available at: https://censos.ine.pt/

Table 20. Sociodemographic composition of the sample Iberifier Portugal VS INE Survey - 2021 Census - and Reuters Digital News Report 2022 (Portugal)

Gender	INE - 2021 censuses	DNR Portugal 2022	Iberifier PT survey
Man	47.60%	46.70%	52.00%
Woman	52.40%	53.30%	47.20%
Non-binary / third gender	N/A	N/A	0.80%
Age	INE - 2021	DNR Portugal	Iberifier PT
	censuses	2022	survey
18-24	N/A	9.30%	7.50%
<i>25-34</i>	N/A	13.20%	11.90%
35-44	N/A	16.70%	25.70%
45-54	N/A	19.10%	31.70%
<i>55-64</i>	N/A	30.80%	16.40%
<i>65</i> +	27%	10.90%	6.80%
Education	INE - 2021	DNR Portugal	Iberifier PT
	censuses	2022	survey
Up to the 3 <sup>rd</sup> cycle (9 <sup>th</sup> year)	61%	50%	2%
Secondary and post secondary education	21%	27%	18%
University education	17%	23%	80%
Household income	INE - 2021 Censuses	DNR Portugal 2022	Iberifier PT survey
Up to € 9.999	n.d.	34.70%	7.60%
€10,000 to €19,999	n.d.	29.20%	28.40%
€20,000 to €29,999	n.d.	19.00%	21.70%
€30,000 to €39,999	n.d.	8.00%	16.00%
€40,000 to €49,999	n.d.	4.60%	9.10%
50.000€ or more	n.d.	4.50%	17.30%
Political positioning	INE - 2021 Censuses	DNR Portugal 2022	Iberifier PT survey
Left	n.d.	32.70%	41.60%
Centre	n.d.	51.50%	52.40%
Right	n.d.	15.80%	5.90%

Sources: Reuters Digital News Report Portugal 2022. Results of the 2021 Census of INE - National Institute of Statistics.

In comparison with these two sources, the sample consulted in this survey tends to be more educated (substantial incidence of individuals with some higher education), masculine (more men than in the population in general) and with higher income. There is also a higher incidence of individuals between 35 and 54 years old in the sample used in this analysis than in the Digital News Report 2022 sample.



### 2.4.2 Data analysis

Table 21. Sociodemographic and political characterisation of respondents

	n	%				
Gender						
Man	273	52%				
Woman	248	47%				
Non-binary / third gender	4	1%				
Age						
18 to 24 years	40	7.50%				
25 to 34	63	11.90%				
35 to 44	136	25.70%				
45 to 54	168	31.70%				
55 to 64	87	16.40%				
65 and over	36	6.80%				
Education						
Basic education (9 <sup>th</sup> year / 3 <sup>rd</sup> cycle)	10	1.90%				
Secondary and post-secondary education	95	17.90%				
University education	425	80.20%				
Performance						
Up to €9.999 per year	36	8%				
€10,000 to €19,999	135	28%				
€20,000 to €29,999	103	22%				
€30,000 to €39,999	76	16%				
€40,000 to €49,999	43	9%				
€50,000 or more	82	17%				
Political positioning						
Left	196	42%				
Centre	247	52%				
Right	28	6%				

n"gender" = 525; n"age" = 530; n"education" = 530; n"performance" = 475. Original questions in the questionnaire: "A1. Please indicate your age"; "A2. Please indicate your gender:"; "A3. Please indicate the approximate annual net income of your household"; "A4. What is the highest level of education you completed?".

The sociodemographic characterisation of the respondents shows that most of them are men (52%), while 47% are women, and 1% identified as non-binary.

Regarding age, the 45 to 54 age bracket is more expressive (31.7% of the answers), and also considering the previous age bracket, we verify that 57.4% of the respondents are between 35 and 54 years old. As for education, it should be noted that this sample has very high levels of education (when compared to the universe of Portuguese people), with 80% of respondents having completed higher education. In comparison, secondary education represents only 18% of respondents, with primary education having a minimal weight in the sample (only 2%).



The dominant characteristics of the sample, middle-aged men (between 45 and 54 years) with higher education, are reflected in the income, particularly with an over-representation of the highest, with 17% of the respondents indicating a net family income above €50,000. However, the net family income with the most significant expression in the sample is between €10,000 and €19,999 per year (28%), followed by the income bracket between €20,000 and €29,999 (22%).

Finally, regarding the respondents' political self-identification, most of them are positioned in the centre (52%), with a greater tendency towards the left (42%) compared to the right (6%).

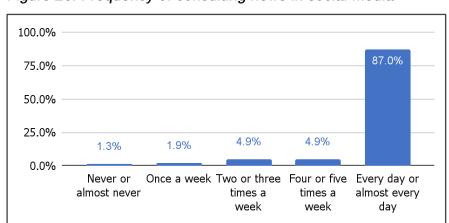


Figure 20. Frequency of consulting news in social media

n = 530. Original question in the survey: "B1. How often do you consult news in social media (paper or online press, news websites, radio, television, etc.)?".

Considering the frequency of news consultation in social media, the percentage of respondents indicated that they consulted all or almost all of them was 87%. The results for Portugal from the Digital News Report 2022, although specific to access to news on the Internet, reinforce the verified trend since they point out that 86.7% of the Portuguese access news on the Internet at least once a day.

The daily presence of news is a consequence of ubiquity, available in newspapers, radio, television, and on the Internet through websites, applications and social networks. However, its active consultation is also a reflection of the centrality of news in the daily lives of the Portuguese in the framework of their social coexistence since the news allows them to inform themselves, form opinions, and approach the themes in more or less casual conversations daily.



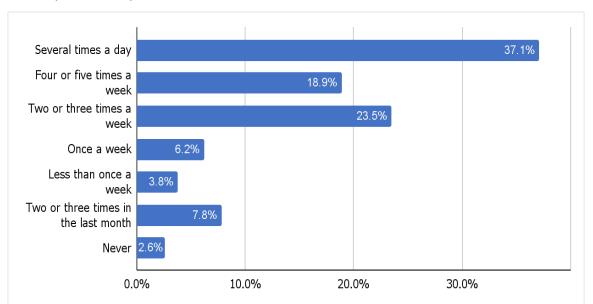


Figure 21. Frequency with which you came across disinformative content in social media (last month)

n = 498. Original question in the survey: "B2. Considering the previous month, how often did you come across content that you classify as disinformation in the media (print or online press, news websites, radio, television, etc.)".

On the topic of misinformation, respondents were asked how often they encountered content they considered as misinformation in social media in the month prior to the survey. The most common response was several times a day (37%), with 19% of respondents reporting that this was four or five times a week and 24% two or three times. More than 4 in 5 respondents (86%) indicated that they had come across content they classified as misinformation in social media at least once a week.

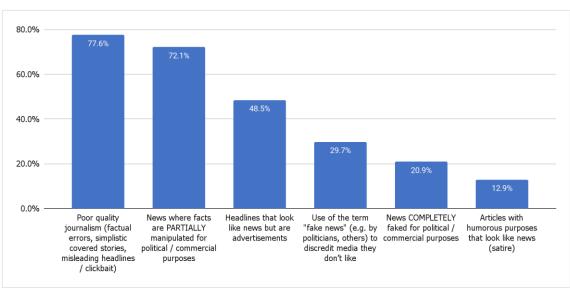


Figure 22. Types of misinformation identified in social media (last month, multiple response)

n = 526. Original question in the survey: "B3. Looking back over the past month, which of the following types of misinformation have you identified."



Respondents were asked to identify the types of misinformation they had encountered online the month prior to the survey. Regarding this question, the most common type of disinformation was poor quality journalism (78%), which reveals the respondents' demand for the quality of journalistic information and, to a certain extent, the accountability of journalism for the misinformation circulating online. It may also be a perception exacerbated by the existence of websites and profiles in social networks that call themselves news or journalism but which convey disinformative content.

The second most common type of misinformation was news with partially manipulated facts (72%), which was in line with the perception that most misinformation content involves appropriating facts, decontextualised, misrepresenting or mixing with false information or images.

Almost half of the respondents also referred to titles that look like news but are advertisements (48.5%). In turn, the use of the term "fake news" to discredit the media was mentioned by about 30% of respondents. Concerning completely falsified news for political or commercial purposes, they were mentioned by a fifth of the respondents (21%). Finally, the minor verified type of misinformation was identifying articles with humorous purposes that look like news (12.9%).

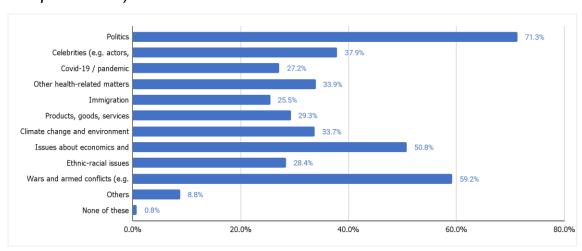


Figure 23. Topics on which information was totally or partially false (last month, multiple answers)

n = 522. Original question in the survey: "B4. In the last month, have you come across totally or partially false information about any of the following subjects? Select all that apply."

When asked about the subjects with which they came across totally or partially false information, the most repeated answer was politics; 71% of the respondents expressed having encountered disinformation content related to politics. Regarding political subjects, due to the ideological nature of the debate, there could be a greater propensity for a respondent to consider that a particular opinion or position constituted disinformation, especially if s/he had a formed opinion on the subject or a clear party identification. The issue was that disinformation, even on other subjects (e.g. economy or immigration), is often framed within a political perspective.



The second most mentioned topic was war and armed conflicts (59%), followed by economy and inflation (51%). It should be remembered that these two themes were much discussed in the media when the survey was applied (September/October 2022), which partly justifies the fact that more than half of the respondents mention them. On the other hand, other themes that generate much misinformation but had less media prominence at the time of the survey, such as covid-19/pandemic, are mentioned less often, in this case by 27.2% of respondents. This means that the evaluation of the potential themes for misinformative content may partly be a result of the greater or lesser predominance of those subjects in the media agenda. For example, in the scope of the Digital News Report 2022, which in Portugal was applied between January 14 and February 10, Covid-19 and politics were the subjects most respondents found false or partially incorrect information in the week before the survey. In early / mid-January 2022, there was a new wave of new Covid-19 cases, and at the end of the month, on the 30th, legislative elections for the Portuguese parliament.

The data collected in this survey continued to give primacy to politics as a topic of disinformation, passing the pandemic and Covid-19 into the background. It is possible to think about a possible relationship between the media agenda and perception towards disinformation topics, on the one hand, and on the other, to relate the processes of disinformation as being strongly associated with, and dependent on, the media agenda.

Disinformation is often directed at specific individuals, and celebrities are also the target of false information. In the ranking of topics that respondents most came across in the month prior to the survey, celebrities came in fourth place (38%). This is followed by health (34%), climate change, and environment (34%).

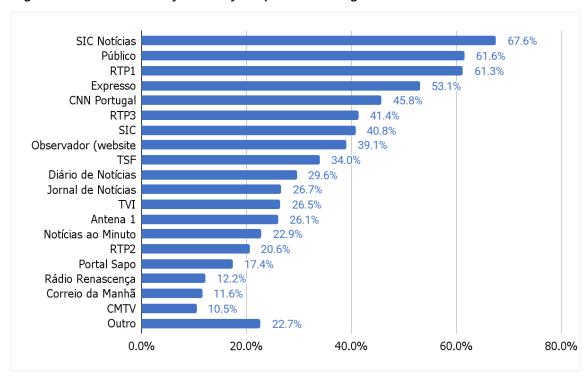


Figure 24. Media usually used by respondents to get informed

n = 524. Original question in the survey: "B5. Indicate the social communication that you usually use to get information (it can be printed or online press, news websites, radio, television, etc.)"



Concerning the media that respondents habitually use for information purposes, SIC Noticias is at the top (68%), being the choice of more than 2/3 of those polled, followed by  $P\dot{u}blico$  (61%) and RTP 1 (61%), the latter being the public television channel that operates under a public service contract with the State. In the fourth position, Expresso gathers the preference of more than half of those polled (53.1%). At the bottom of the preferences of those polled is CMTV (10,5%). It should also be noted that 23% of the respondents indicated that they kept themselves informed about another media outlet, which was not present among the options.

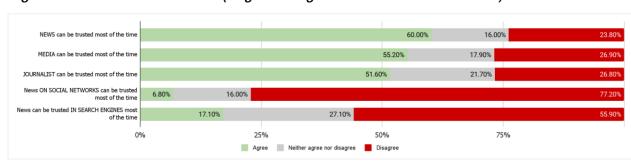


Figure 25. Confidence in news (degree of agreement with statements...)

n"news" = 513; n"media" = 513; n"journalists" = 512; n"social networks" = 513; n"search engines" = 510. Original question in the survey: "B6. Considering news and social media in general, how much do you agree with the following statements:".

Regarding trust in news, most respondents agree that news can be trusted most of the time (60%), a high percentage in the international panorama, which finds an echo in the results for Portugal of the Digital News Report 2022 (with 61% of Portuguese respondents claiming to trust news in general). However, when it comes to media, the percentage drops (55% agree that it can be trusted), dropping even further regarding trust in journalists (52%). In turn, news in search engines and social networks are mistrusted by most respondents, with only 17% agreeing that news appearing on platforms such as Google can be trusted, and only 6.8% agreeing that news on social networks such as Facebook, Twitter, Tik Tok, etc. can be trusted.

This data goes in the direction of the trends and proportions identified in the 2022 edition of the Digital News Report 2022[6], that is, of high trust in news and its agents, brands and journalists but a lower trust in informative online content, namely search engines and, above all, social networks.



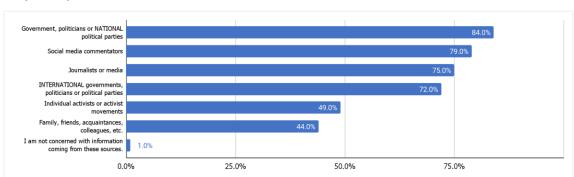


Figure 26. Concern about potential disseminators of misinformation (multiple response)

N = 525. Original question in the survey: "B7. I am concerned about false information disseminated by... (select all that apply)".

As part of the Digital News Report 2022 it was found that 7 out of 10 Portuguese are concerned about what is real or false on the Internet. However, the same disinformation content disseminated by different agents may have a different impact. In this sense, it is important to recognise whether respondents' concern about disinformation varies according to the social actor concerned.

Individuals' responses indicate a higher concern regarding disinformation disseminated by the national governmental sphere, 84% claim to be concerned about false information disseminated by government, politicians or national political parties.

Also noteworthy is a high concern about disinformation that is disseminated by the media, in particular by commentators in the media (79%) and by journalists or the media itself (75%).

The overall phenomenon of disinformation – see the case of the Covid-19 pandemic and more recently the war in Ukraine – raises concern around international political actors (governments, politicians or parties), with 72% of respondents expressing concern about false information disseminated by these actors.

At a lower level of concern we find individual activists or activist movements (49%) and also family members, friends, acquaintances, etc. (44%). A possible interpretation is that although disinformation becomes viral through the network architecture of information among individual actors, it is the disinformation coming from traditional institutional actors (e.g. government and the media) that most concerns citizens. Furthermore, only 1% of respondents stated that they are not concerned by any of the sources presented.



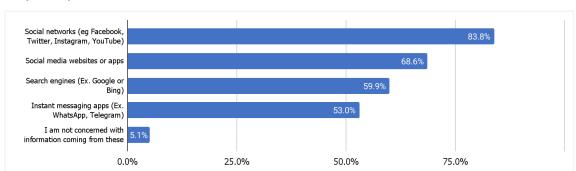


Figure 27. Concern with online platforms that promote misinformation (multiple response)

N = 526. Original question in the survey: "B8. I am concerned about false information being disseminated in... (select all that apply)".

Regarding the online platforms where false information is disseminated, individuals' greatest concern relates to social networks (Facebook, Twitter, etc.), which were identified by 84% of respondents as a source of concern. A surprising fact, given the responses on trusting news from different sources, is that social media websites and apps warrant a greater concern from respondents (68.6%), when compared to search engines (60%). A possible interpretation is that false information disseminated in a social media outlet – similarly to what we saw regarding agents – is perceived as having a greater impact than false information in an online search result. In turn, and reflecting the lower concern about misinformation circulating among networked individuals and groups, instant messaging apps (such as WhatsApp) gather the lowest percentage of concerned respondents, still more than half (53%).

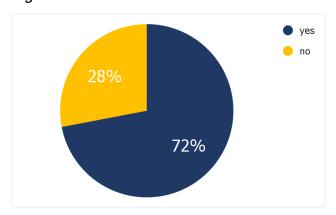


Figure 28. Loss of trust in some media due to finding disinformative content

N = 446. Original question in the survey: "B9. Did you stop trusting any media because you found content that you consider false or disinformation in that medium?".



Almost three out of four respondents (72%) say they no longer trust a media outlet after coming across information they considered false. This high percentage may reflect greater demand from respondents for the quality of information from traditional media, but also the emergence of new media, in particular websites and social networking pages that claim to be news or journalistic but convey misinformative content.



Figure 29. Media that respondents stopped trusting (open answer)

N = 193. Original question in the survey: "B9. Did you stop trusting any media because you found content that you consider false or disinformative in that medium? B9.1. Can you specify the medium/media in question?"

Specifically on the media which they no longer trust, the most common answer from respondents was *Correio da Manhã* (mentioned by 35% of those who answered) and CMTV (30%). CNN Portugal (22%) and Observador (20%) also stand out negatively in this particular regard. Next come TVI (14%), SIC (12%), *Público* (9%) and *Expresso* (9%).

In the analysis of the media in which respondents lost trust, specific brands are mentioned; however, it should be remembered that, in this answer, as in the others explored in this survey, it is necessary to pay particular attention to the respondents' socio-demographic characteristics (see more in the methodology).



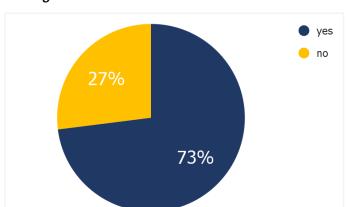


Figure 30. Disablement of social communication media after breach of trust due to finding uninformative content

N = 307. Original question in the survey: "B9. Did you stop trusting any media because you found content that you consider false or disinformative in that medium? B9.2. Did you stop using that medium or stop following their profile on social networks?".

When asked whether the breakdown of trust in a social media outlet had resulted in its non-use (or the end of following it on social networks) we also found that almost three out of four respondents (73%) answered in the affirmative.

This response reveals the importance of trust in a social media outlet, with this trust being a basis for its use. However, we cannot exclude the hypothesis that a breach of trust in a certain brand results in a gain of trust in another. In this sense, a breach of trust may not translate into a general decline in the use of a particular medium to consult or access news, there are transfers of trust, resulting in gains and losses of users between competing brands. Moreover, the loss of trust may not be definitive, but result from a specific and momentary event (e.g. a news item with uninformative content that was inadvertently broadcast by a media outlet), and that trust may be regained later.



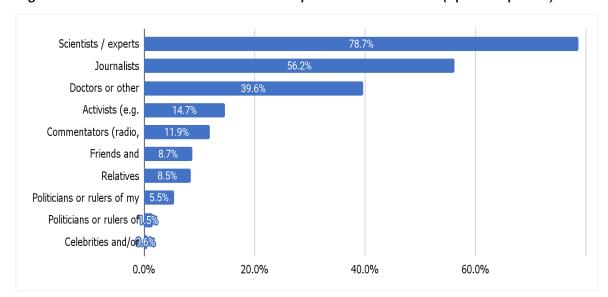


Figure 31. Sources of information that respondents trust most (up to 3 options)

N = 530 Original question in the survey: "B10. Which of the following sources do you trust the most when receiving information or finding out about a topic? (select UP TO 3 options)".

Regarding the sources of information that respondents trust most scientists/experts come first, indicated by about 8 out of 10 respondents (79%) of the respondents, followed by journalists, who are the trusted choice for more than half (56%). Interestingly, a specific category of experts, doctors and other health professionals are chosen by 40% of respondents, less than scientists/specialists, which can be understood in light of the complexity and evolution of the Covid-19 pandemic. Still, in a question asking to select up to 3 options, most respondents chose scientists/specialists, journalists and doctors and other and other health professionals.

Activists were trusted by more than 1 in 7 respondents (15%) and commentators were trusted by almost 1 in 8 respondents (12%). Next came friends and acquaintances and family members (both at around 9%). In turn, national politicians and politicians are only in the top 3 sources of trust for 5.5% of those polled, a percentage which falls to 1.5% if politicians and politicians from other countries are used as a reference. Last on the list are celebrities and influencers on social networks (0.6%).



# 2.5. Results of the interviews with Spanish media editors

The nine interviews held with media directors and editors in Spain were analysed from two approaches. The first one was a systematic and in-depth analysis of the discourse. Several researchers interpreted each speech and put them concerning the rest of the interviewees. On the other hand, to confirm the main ideas that had been developed during the interviews, a linguistic software program T-LB Plus was used that allowed three textual approaches: the first one was the search for thematic clusters among all the interviews; that is, which elements were remarkable in the interviews; the second one was whether these thematic clusters contained related terms, and the third one was to look specifically for connections between dis/misinformation and economic benefits.

# 2.5.1. Media protocols for fighting fake news

All the editor's interviewees explained that their media did not have a specific protocol for identifying fake news. However, all but one alluded directly or indirectly to the fundamentals of the journalistic profession as a guarantee against hoaxes (Interviewee 1: "What we have are, within the style guide, the rules that must be complied with to report information"; Interviewee 2: "Although we do not have a protocol, we do have procedures"; Interviewee 3: "I am of the theory that there is no need for a special protocol other than to apply the rules of journalism"; Interviewee 4: "The protocol is that of pure and simple journalism, right? the one we have used all our lives to do journalism"; Interviewee 6: "This is journalistic work and now also because of a style book and a code of ethics we have"; Interviewee 7: "What we do have, I insist, is the methodology, experience and professionalism of many years of work"; Interviewee 8: "[We use] clear criteria on the verification and contrast of news" and Interviewee 9: "We have some standards, let's say, deontological, but we do not have a protocol"). Along with this positioning, two interviews mentioned the existence of journalists specialised in hoax detection, and up three interviews mentioned the existence of training in using digital tools for traceability and verification of information.

Concerning the occasional appearance of false information published in different media, all the interviewees recognised the need to update the protocols for publishing information, given the profession's transformation in recent years. They admit that it is easier or more plausible to make mistakes in this context. The changes noticed can be classified into two areas: the ability to make content go viral on social networks and platforms (Interviewee 7: "The only nuance is that now the ability to multiply, especially through social networks"; Interviewee 6: "Disinformation always [existed], but as the platforms have expanded them as a loudspeaker, the issue of disinformation and how it has permeated the media" and Interviewee 3: "Now they spread faster thanks to social networks since we all have a cell phone, but basically the hoaxes have always been there"). The second area is the speed with which they work: (Interviewee 2: "We have encountered a bit of this unforeseen tsunami of fake news"; Interviewee 4: "Where there is more risk in a media and, in the mine, in particular, I think in all is in the breaking news area, which is where it is receiving all those inputs at breakneck speed" and Interviewee 5: "I think we are overwhelmed not so much by the amount of information, but by the speed at which it is handled, moved, and transmitted").

On many occasions, the interviewees move between concepts that seem equal: fake news, exaggerations, hoaxes, ideological biases, or false information. It can be deduced that there may be a certain lack of orthodoxy in the definitions, although all clearly distinguish what is contrasted information from what is not. Concerning the lack of accuracy or completeness of the information, it is sometimes pointed to the intentionality of the source (Interviewee 7:



"As a general rule, sources always have some perverse interest when they leak you some information"; Interviewee 3: "Sometimes we are victims of hoaxes, that is, sometimes they tell us a lie and we propagate it or help to propagate it, but we are not fabricating false information") or to the awareness that the truth does not exist (Interviewee 6: "When you write a headline – subject, verb and predicate – you are already giving an editorial charge to the information"). Only in one interview is the existence of a service contracted to a company specialised in the provision of data acknowledged, and only on another occasion does another interviewee acknowledge having personnel specialised in the collection of reliable data. Finally, only two interviews explicitly mention the clickbait content automatically generated and appearing on media web pages, but in neither of the two cases do they know the filtering system for such content.

# 2.5.2. Staff training to stop disinformation

Only in two interviews, the media editors indicated the existence of specific training courses for the staff (Interviewee 5: "What is true is that the people in the verification department do have training in some areas. In the newsroom, some of them have had training, and many people have found it on their own" and Interviewee 6: "We frequently give training courses to our journalists so that our data department can support more objectively the subjective work that the journalist has done before").

In general, training in detecting hoaxes or false information is based on experience and/or professional recommendations, which in some cases are more systematised. Some of the most outstanding indications we have found in this regard are: Interviewee 1: "We demand that all sources be consulted when it is a topic that is seen to be of interest or that has different positions"; Interviewee 2: "The whole verification process corresponds to some internal work mechanics of the newsroom"; Interviewee 3: "It is taught. That is to say, when someone joins us, they taught more or less what they have to do [...], but there is no special training on this"; Interviewee 4: "The fundamental thing is always to have several sources, it is the way to have different viewpoints"; Interviewee 7: "It would be very nice to tell you that we have it [training], but we don't. But I think it is one of the things that we have to do. But I think it is one of the things we should address"; Interviewee 8: "Daily with indications, comments from editors or questions about the contrast made by editors"; Interviewee 9: "Well, call everyone, everyone involved, everyone who can provide you with information".

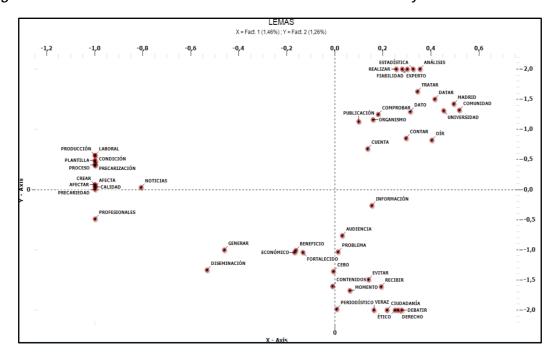


Figure 32. Robust correlation between the words most used by interviewees

Source: own elaboration. Created with T-Lab

Three thematic clusters can be detected in the reciprocal relationships between the keywords used by the interviewees. The first cluster is below the X-Axis and is related to the information's economic relationships, contents, and audience. A second cluster is above the X-Axis and toward the right of the Y-Axis. It is related to all the work being carried out by fact-checking platforms, studies from Academia, and the efforts of institutions to fight disinformation. A third cluster is configured by the problems of professional precariousness, of unfavourable working conditions for journalists, and how this would affect content production. In fact, these three clusters summarise the three fundamental approaches to interviewing. First, with a significant weight on the value of misinformation in the professional context; second, with the economic implications and finally, with the full review of studies and work being carried out to assess the social impact and the impact on the media outlet.

#### 2.5.3. Agreements with fact-checking platforms

Although some media outlets recognise that they had reached specific agreements with verification agencies to cover, for example, electoral periods, most of them had not formalised continued cooperation agreements with the verification platforms because they did not offer anything different from what they already did on a day-to-day basis (Interviewee 4: "it didn't offer us much more than what we were already doing in the newspaper". Most of the interviewees had internalised the discourse that verification had to be part of their professional work routines (Interviewee 8: "We do not think it is necessary to outsource a task that is part of the professional obligations of our journalists"; Interviewee 2: "The verification process corresponds to the internal work mechanics of the newsroom"; Interviewee 9: "What we do is publish news, not deny news"). However, there are also secondary reasons why we do not work with verification companies (Interviewee 1: "We are a very small media"). Among the responses received, some highlighted the existence of training for professionals in the use of specific verification tools in this specialised



department (Interviewee 5: "Then there is more specific training for journalists, much more advanced, of specific tools or processes for the people to whom the training department is dedicated"), especially in the face of the challenge of social networks. In this task, several interviewees distinguished between levels of news, implying that contrast was not necessary for 90% of the information and only in sensitive ones.

In general terms, using social networks as a primary source was rejected, and the contrast of information through direct or reliable sources is preferred. However, social networks were the origin of many contents subject to internal verification processes (Interviewee 4: "There is a task of making sure that the thing we are telling, what whoever is saying in a tweet, is based on at least certain facts"). Some interviewees also distinguished between real or verified profiles and those whose identity is doubtful (Interviewee 3: "We know who it is, I don't see much of a problem"). The problem of checking the veracity of facts was not limited to networks but also reached so-called indirect sources such as agencies (Interviewee 4: "we have no certainty that what we are getting from agencies is what is really happening", concerning the war in Ukraine).

As for the use of clickbait, there is a conscious use of this strategy, which is related to the economic reality of the journalistic enterprise (Interviewee 6: "Quality journalism is very difficult at the present time"). However, its use was limited to content that is more focused on entertainment (Interviewee 6: "We play more with bait and deception"). Another interviewee, however, emphasises those topics that originate in social networks, which are included in humour sections, but which follow the same verification process (Interviewee 4: "Even a humour section like this is not done lightly").

# 2.5.4. Journalistic routines (clickbait, use of social networks)

All of the interviewees stated that information coming from social networks is considered an unreliable source, so it was not acknowledged that this is a common practice in the exercise of journalistic routines (Interview 1: "In everything that comes from social networks, extreme care is taken (...) social networks are taken very, very, very carefully. Often people play at doing citizen journalism, and that is not journalism".

In all cases, they were committed to cross-checking information and working with reliable sources such as news agencies which can be asked to expand on the data in case of doubt. Furthermore, they insisted on the need to verify and be especially careful with information that arrived through other channels and, if they could not confirm its authenticity, not publish it. Many respondents claimed that they did not outsource the work of data verification because it was in the very essence of journalistic work: "Newspapers were much bigger verification agencies than verification agencies. In other words, we were checking all day long, all day long" (Interview 3).

Some media outlets recognise that they had reached specific agreements with verification agencies to cover, for example, electoral periods, but with the feeling that they did not offer anything different from what they already did on a day-to-day basis; "It didn't offer us much more than what we were already doing in the newspaper" (Interviewee 4).

Some media editors also emphasised that their staff not only do not contribute to disseminating disinformation through the use of the networks but that although they are very active on the network, they act as a firewall against unverified information. "I do not think that a journalist contributes to spreading fake news; on the contrary, I believe that he or she



is a dike in social networks against this" (Interview 2). However, they recognise that the networks are a reality that should not be underestimated, especially in the younger age groups who have them as their only point of information. In this sense, some testimonies recognise that information that reaches them through networks is valuable and valid, but they cannot use it because they do not have the time or the means to verify it. In this sense, they recognise that on occasions, they have been "let off the hook" by prioritising speed over quality and verification, which is why, in all cases, they are now committed to verifying before publishing.

Most of those surveyed say they cannot quantify the economic benefits that the dissemination of links with bait would generate for the audience and claim not to have any data on the subject or give a roundabout way of not giving a clear answer. Among the arguments put forward to justify the lack of quantitative data was the lack of resources in small media, not considering them a source of news interest or the fact that they lack sufficient credibility. Only one media outlet claimed that this income represented between 10% and 15% of the total and insisted on the difficulty of competing with the media better positioned in rankings. In addition, s/he criticised the fact that these classifications did not consider the quality of the media outlet but rather the volume of traffic it is capable of generating.

They recognise in their answers that all serious media did not use force and false clickbait on a headline that leads to a news item that does not exist. Nevertheless, they admit, for the most part, that they all use clickbait. However, more understood as a "hook" and referring to the objective of attracting the reader's attention, although they recognise a certain abuse of this new possibility that the Internet offers them; (Interview 2: "clickbait is an exploitation that perhaps we are all using and sometimes abusing of a possibility that the Internet offers us. [...] the classic headline is a clickbait that has been used because, let us say, it is a way of attracting attention so that people go deeper, isn't it? On the web, it's a bit of the same mechanics, it's true that it is used and abused with a certain aggressiveness)".

In their responses, they recognise that the viability and economic survival of a medium and its editorial independence nowadays depend on diversifying its sources of income. Clickbait is a valuable resource for minor issues such as society or entertainment. (Interview 6: "All media seek income and audiences, but yes, it is often used as a 'pinch'. Furthermore, this is the way it is)".

Even in the media that recognised that they promoted it, they avoided quantifying the economic return it brings them because they considered that this could negatively affect their professional routines. For example, in the Interview 2: "we do not have it quantified, nor do we want to know what it provides us, which would perhaps be a slightly perverse account because it would force you to perhaps promote it. In the case of public media, this type of practice is forbidden".

Most responses generally focused on rejecting this practice of using clickbait or news clickbait as part of journalistic routines. They were unwilling to invest in bait content. Their income, sometimes based on subscriptions, made them feel inferior to other media that receive subsidies or have more diversified funding sources. While condemning this type of information and practices, some editors recognize that some media have turned clickbait into art. It is necessary to distinguish between "hook" headlines that incite clicks and false headlines that are reprehensible. In general, they all favour giving priority to ethical aspects over economic benefits.



## 2.5.5. How to get useful audience feedback to make better information

Concerning their dealings with the audience, they emphasised that interaction was now much more immediate and bidirectional due to the characteristics of the digital environment, which had opened up new channels of exchange. They recognise that, sometimes, bait content was used because the data shows that it works and interests the audience. Therefore it is necessary to focus on the responsibility assumed by the reader: "The consumer who has to stop this and, I add, the problem also, although journalists are accused of trivialising the content, many times clickbait topics are more banal topics, really what is being trivialised is consumption, because then you realise that this type of contents is the one that often works the most". Therefore, both parties must learn to function in a new digital ecosystem (Interview 2).

They agree that they rarely receive feedback to congratulate them for the excellent work done and that readers do not easily detect these bait contents or "Most people don't even realise what sponsored content is, they are confused about it. Even if you have it labelled. it doesn't matter. I have the impression that there is a minimal culture of journalistic reading, in the sense that they do not teach people to read the press, they do not teach what advertising is, what is sponsorship" (Interview 4). The report for Spain of the Global Disinformation Index points out: "Spanish sites have to improve the key operational policies in place, including information about their funding and ownership, guidelines for usergenerated content, a statement of editorial independence and a clear and transparent process for correcting errors" (2021:10). Furthermore, some media even blame a worse "quality" of readers, which sometimes leads them not to make a reasonable interpretation of the content or to stay only in the reading of the headline and not to go to the body of the news: "Readers have worsened, people do not know how to read, they do not know how to interpret... the ironies, I don't even mention. The double meanings, the ironies... people don't know how to interpret... The biggest complaints we find are with writers who are a bit literary and make puns, ironies, double meanings... and people miss a single one... well, many people do. Still, some don't and take it literally and say "But you don't understand that this is a double meaning and that it is referring to..." (Interview 9).

Some interviewees insist that the audience is especially critical of the work of public media. "If we are already attributed manipulation relations because you support a news item, if you also unintentionally spread false information, you receive a lot of criticism, you are crushed, they accuse you of not doing the job for which you are paid" (Interview 5).

Some say that the audience is not very critical and that the complaints they receive are more of an internal nature from the professionals, who feel subordinated to this content for economic reasons. And they praise their subscribers' loyalty, who they qualify as people who make a more qualified search and selection of news. "They are not external complaints but an internal discomfort of being subordinated to this type of information to maintain the viability of the project. The complaints don't come from outside. There are not many people complaining. Subscribers are loyal; they stay at the top and don't get this information. The readers of the news at the bottom come primarily through search engines; they are not loyal readers. For subscribers, that is part of the landscape, and they don't read it (Interview 6).



#### 2.5.6. Economic benefits and ethics

All interviewees were unanimous in stating that the publication of fake news would ultimately affect their economic benefits, either by decreasing the number of subscribers or their prestige and credibility, as well as something intangible but valuable, such as reputation.

Some say that the publication of fake news especially benefits the traditional media because the audience ends up returning to the sources they consider more reliable "The dissemination of a lot of fake news ultimately benefits the traditional and conventional media because people will always want to go to a place where they feel safe, and in the conventional and traditional media, (...) we notice that people feel safe with our information" (Interview 2).



Figure 33. Comparisons between keywords in the interview corpus

Source: own elaboration.

The image shows a visual graphic of how disinformation is linked to economic benefits and a network of equidistant connections between all the actors.

As for the need to generate an internal debate, some media apologised for the lack of resources and time to focus on these issues or not being able to do so with the desired regularity. However, most answers assure that they carry out a constant and daily debate but that it has changed its protocols. Now it is adapted to the new times and the digital environment "now the meetings are constant through what I am telling you, the WhatsApp groups or a system called Slack that we also use, we are all the newsroom permanently connected (....) this has to be given, and we have a debate, we see if it is given, if it is published, how it is published... in short, we do have that debate permanently and I tell you that with real and concrete cases" (Interview 2). Some, although they claim to maintain this debate, recognize that this occurs when a problem arises and insist on the importance of remembering the basics of journalistic practice. But in general, they emphasised the need to generate this discussion and on the benefits it brings for the media's own internal audience "It is a permanent open debate, and I think it is also something that people in the newsroom appreciate. They appreciate the debate and effort, which is theirs in the first



place and that of all of us, for doing things with these very high standards, to be honest" (Interview 4).

In the answers, the cause-effect relationship between resources and content quality is evident: "The fewer the resources, the worse the quality, and that is so, it is an indisputable axiom" (Interview 2). However, a direct relationship between the precarious working conditions of professionals and the quality of the news generated is more clearly intuited in the media with fewer resources. Not so much because of the journalists' work but because of the limited resources in terms of time, staff and means, which forces them to be unable to compete under the same conditions as the big media. Moreover, this also affects the productivity of professionals and their motivation. "Yes, it is true that there is a loss of productivity, a lack of motivation and a growing lack of pressure, above all due to the issue of salaries, working hours, the tension, it is a profession where there is a lot of tension, where one suffers, where there is a lot of joy, but one works very hard, one works long hours and where the salary is quite bad" (Interview 6).

Several interviewees insist on not linking the salary with the quality of the information generated because they refer to an endemic evil of the profession itself. (Interview 4: "We journalists have a responsibility, which goes beyond what we charge"). Moreover, the lack of prestige and valuation of the profession at the social level is very present in the responses. Furthermore, some of those responsible take direct responsibility for this low quality. (Interview 4: "I hold media managers much more responsible for the disinformation that may come out of the media than media journalists. Our obligation as directors (...) is to articulate the mechanisms for our media to be journalistically impeccable)".

Some interviewees insist on the need to debate what is considered media today and demand a policy of transparency regarding media ownership and editorial policy. The report for Spain of the Global Disinformation Index points out: "Attribution, comment policies, editorial principles and practices, ensuring accuracy, funding and ownership are issues to improve in the Spanish media ecosystem" (Global Desinformation Index, 2021: 15).

# 2.6. Results of the interviews with Portuguese media editors

#### 2.6.1. Introduction

The main objective of this part of the report is to find out how the newsrooms (editors, directors, advisors or publishers) of the Portuguese media deal with disinformation, but also to gain some relevant insights into three other areas that are pointed out as critical for the future of the media in Portugal, frequently: the apparent degradation of journalists' working conditions, audience trust and, finally, funding and business models.

To assess how the media deal with disinformation, we wanted to know the following:

- 1. The verification protocols adopted in newsrooms.
- 2. Whether they admit to disseminating false news.
- 3. In which situations do they debunk misleading information
- 4. Whether the journalists received updated training on new practices of deconstructing disinformation.

Given that the problem of misinformation is part of a broader environment of concerns about the journalistic practice, as mentioned above, the study aimed to simultaneously collect interviewees' reflections on the precariousness of newsrooms, the trust placed in the information transmitted by the media and perspectives on how they would like to ensure the sustainability of the companies.

The proposed questions emphasised the plan for solutions rather than the diagnosis of the current situation (during 2022). The questions aimed to determine what changes should be implemented to improve the working conditions of journalists and stabilise newsroom teams.

The interpretation of what justifies the Portuguese people's trust in the news was accompanied by the question of how they differentiate journalism from other content. In the funding segment, the approach proposed a choice between funding models: more advertising, other revenues and B2B business models, such as sponsored content; subscriptions and individual funding (crowdfunding, patronage, etc.); public funding; and private funding (grants, specific projects, etc.).

The survey was conducted through interviews with 17 journalists in editorial management positions in media companies. The responses were given with the guarantee of total anonymity during September and part of October 2022.

The permeability of the media to misinformation is often pointed out at international level as one of the factors that can negatively affect audiences' trust in the media. Although Portugal is one of the countries in the world where citizens most say they trust journalism, it is not clear why this trust remains well above the international average. For the interviewees, the justification may have two almost opposite supports, which still leaves the question open. For some, trust may be linked to the quality of some media, with special reference to the public TV channel, while others point to the high media illiteracy of the Portuguese, i.e. the lack of analytical and critical capacity to question the journalistic contents (or others) to which they have access.



Still on trust, an area of consensus is the need to differentiate journalistic content from other content, and one solution pointed out is the use of labels. All interviewees also defend a greater focus on citizens' literacy in order to improve trust in journalism.

As mentioned above, financial sustainability is a very relevant issue for the media and journalism in Portugal. Some editors defend that journalism should not be seen as a business and even advocate that journalism should give up advertising. The vast majority, however, prefer a combination of funding models and highlight the role of private support in different models. Those who defend public funding explain that it does not necessarily have to be in the form of money, but may take other forms, namely through tax support.

Finally, but equally relevant in the Portuguese media ecosystem, are the working conditions of journalists, on which the interviewees have very similar views and proposals. Better salaries, conditions to enjoy a personal life, continuous training or the end of green cards are the main proposals to improve journalistic work.

#### 2.6.2 Analysis of the responses

The analysis of responses below first indicates the exact question that was asked of each editorial leader, with the first four referring to issues of misinformation, and the remainder, in blocks of two, to labour issues, audience trust and funding and business respectively. A qualitative analysis of the responses is presented below, but with a quantitative element introduced by categorising the main ideas in each response (which was not possible for all questions). The analysis of each question is completed with the presentation of the quotes, fully anonymised, considered most relevant to express the results.

Q1. Does your media outlet or publishing group have a protocol in place to deal with the possible publication of fake news? Do you have verification systems in place to correct or amend unreliable content?

The analysis of the answers allows us to conclude that most of the media do not have a news verification protocol: 10 out of 17, more specifically, corresponding to 58% of the sample. Five of the interviewees do not clearly answer the question, overestimating the informal verification system. Only two of them have a protocol and, due to their specificity, can be identified: the recognised fact-checker and the national news agency. Three classifications were used for the differentiation by quantitative categories: a) not assumed; b) avoids the question; and c) yes assumed.



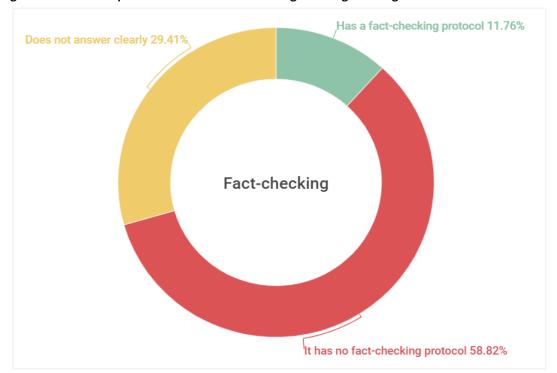


Figure 34. Active protocols on fact-checking among Portuguese media

Source: Own elaboration.

The standard line of responses goes in the direction left by the following answers:

- "The rules are not written";
- "We have no formal protocol, but we do pay a special attention";
- "We rely on the experience of the editors".

# Q2. Do you consider the hypothesis that journalists have already spread disinformation by using social media as their main sources?

The analysis of the answers allows us to draw two fundamental conclusions: only a minority is sure that they have not spread disinformation originating from social networks in their environment, and the overwhelming majority confirms that this has happened or, at least, may have happened.

The quantitative categorisation carried out from the answers indicates that only 3 out of 17, exactly 17.6% of the interviewees, declare that they have not spread disinformation originating from social networks. But 10 out of 17 (58.8%) admit to having done so, and 4 out of 17 (23.5% of the sample) assume it has happened. Here the categories used included the following three classifications: a) yes; b) admits it may have happened; and c) no.



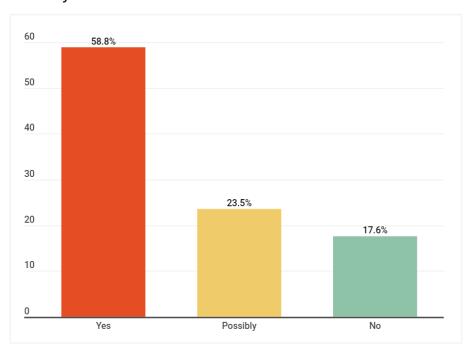


Figure 35. Perception of Portuguese media editors on the dissemination of disinformation by their outlet

Source: own elaboration.

The statements highlighted below represent the most relevant ideas:

- "It is natural that it has already happened";
- "It happened associated with the rush to do it";
- "We have several titles and there are some that may be more subject to that fragility. News from the 'people', social".

# Q3. In recent years, have verification procedures been strengthened? In which situations do you decide to update or refute a false news item?

Half of the interviewees state that the verification procedures in their medium have been strengthened, but only two of them use more appropriate methodologies and strategies for this purpose. The dominant message is that the procedures have been strengthened from the usual verification techniques. As a general rule, they all admit that there is an offer of contents more tinged with misinformation and which requires more vigilance and prudence.

Only in a more recent media, digital native, was it decided to resort to an effective reinforcement in the verification. In this case, there is an external person to the team – who rotates – who is responsible for doing a final fact-checking. This happens because there was a serious problem with one of the papers published in the past.

In this case it was not possible to make a more quantitative analysis, but a theoretical categorisation was applied, grouping the elements of the answers into the categories: a) usual procedures, b) reinforced procedures, c) use of specific method, and d) more vigilant and cautious.



From the interviews, some dominant ideas are drawn, represented through the following statements of the interviewees:

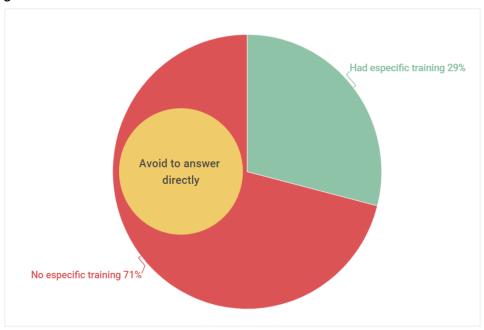
- "The verification procedures are the usual ones in journalism, of confirming sources":
- "We have strengthened the verification mechanisms because we can see that a lot of false information is circulating, not only on the social networks but also on the normal channels";
- "Yes, they were reinforced, precisely because in an investigation that we were doing we noticed two errors (...) At this moment, there is a person outside the work, who is not close to the process, (...) who is responsible for fact-checking the piece".

# Q4. Does the newsroom have up-to-date training on how to combat disinformation? If yes, internal or external?

The answers to this question show, in general, how the issues of disinformation are not seen as fundamental in a potential training process for journalists in the newsrooms.

The quantification of the answers of the interviewees indicates that more than 70% of the media has not had or promoted any type of specific training. And of these, 29% do not give a direct answer. The group that has had training is either a partner of the IBERIFIER project or has had training provided by the project. One medium has had training provided via the marketing team and not from a journalistic point of view. This analysis was based on the theoretical categorisation: a) no, b) does not fit the question, c) yes, d) some.

Figure 36. Perception on the journalist's skills and training to mitigate disinformation in Portugal



Source: own elaboration.



Selected quotes from interviewees help clarify the lack of training and some embarrassment at not betting on journalists' qualifications:

- "It's internal training. In the newsroom, we talk a lot about these issues. And whenever someone new enters the team, we talk a lot so that the person integrates into this line of action that we try to follow":
- "The newsroom does not have up-to-date training in this area. It doesn't";
- "There have already been members of the newsroom who have had training in media literacy through the Journalists' Union".

# Q5. What changes can be made to working conditions to improve the quality of journalistic work?

Better salaries, better conditions so that journalists can have the right to their personal life, more training (and continuous training) are the suggestions that find more echo among the professionals heard. "Better salaries", "respecting schedules and shifts" or "updating salaries" are statements that stand out among the proposals. On a second level, there is the need to promote stable contractual ties and to put an end to "green receipts".

There are also other aspects mentioned that are worth naming: more journalists, more investment in technology and innovation, combating piracy of newspaper pdf. The theoretical categorisation took into account: a) salaries, b) personal living conditions, c) continuous training, d) "green receipts".

According to the respondents' answers, the following quotes help to decode the main conclusions:

- "Improve salary conditions, working hours (too long hours lead to burnout and increase the probability of errors) and more training: writing techniques, technology";
- "Update salaries; make career progression effective; invest in permanent employment contracts; invest in paid internships; improve policies for reconciling personal and professional life; do not exceed the contractually established working hours; compensate overtime / extraordinary work";
- "The first is to pay journalists more" to avoid the issue of precariousness, to have contracts properly done and with the associated benefits. And put an end to false green receipts. Just now a journalist was fired after being in a newsroom for 10 years. As it was a green receipt, the journalist was left with nothing (...) Then, also try to give more benefits, so that people can have the right to their own lives. The life of a journalist is very complicated, the news doesn't have time to happen, to try and make sure that people don't feel like slaves, and that journalists feel that they have the right and time for their own lives.

# Q6. What would you suggest to improve the stability of teams and the quality of newsrooms?

The question on how to improve the stability of newsrooms received similar answers to the previous question, with "respect for the time and space of the journalist's personal life" and "respect for schedules and the right to disconnect" gaining importance, followed by the need for continuous training. There are those who stress the fundamental importance of "investing in training and mental health policies". The list also includes the recruitment of more journalists for the teams and more class awareness, through the promotion of editorial



boards. The theoretical categorisation used is divided into: a) personal life, b) schedules, c) training.

Figure 37. Most frequent words when addressing strategies reduce attrition and improve quality of life in newsrooms in Portugal



Source: own elaboration.

According to the interviewees, the following ideas are worth highlighting:

"More time to write articles, achieved through fewer articles required from journalists. Concern with the need to respect the personal time and space of each employee's life, as well as the need for management to be really committed and attentive to the well-being of the people with whom they work";

"Investing in training; investing in mental health policies; respecting working hours and the 'right to switch off'; favouring the independence and autonomy of journalists".

Q7. Although stable and higher than in most countries, the trust of the Portuguese in journalism and the media may be at risk. What reasons do you identify to justify the trust of the Portuguese in the media?

The issue of the trust of the Portuguese in the press is not perceived in a consensual manner. A majority of those interviewed consider that the high level of confidence of the Portuguese is due to the recognition of the traditional media, namely "the good work done by some media organisations", and the "decent journalism that is practised".

Some point out that "the media have behaved reasonably well on important issues for the country". This is not necessarily a good thing, explains the head of one media outlet, as it means that certain issues are treated in the same way. The existence of a public channel seen as an anchor, the association of journalism with "Telejornal", or the excellence of some media and the absence of major scandals related to the performance of the media, and also the courage to expose successive abuses of the public administration, are other arguments pointed out to justify the confidence of the Portuguese in the media. Also in this group, one of those interviewed highlighted the role of alternative journalism.



On the other hand, a third of those interviewed point out that the feeling of trust may be related to the illiteracy of the Portuguese. "They have little critical sense", is mentioned by several interviewees, as well as "deference in relation to figures in power or in positions of prominence in society". Another element of the sample even mentions that this trust is justified by the tolerance of the Portuguese. "Unless the nonsense is very big, the people are tolerant". Given the difficulty in quantifying the answers, the simplified theoretical categorisation was adopted: a) recognition of traditional means, b) illiteracy of the Portuguese.

Given the difficulty in carrying out a more quantitative approach to the answers to this question, the quotes taken from the interviews become more relevant, as follows:

- "The good work done by some of the media, despite the difficulties";
- "The media, namely on issues that are important for the country, have behaved reasonably well and show a consistency in relation to certain issues (...). And this is not necessarily good. When we speak of politics and some sectors, of justice itself, they arouse more distrust than we [journalists]. (...) On the other hand, we have not entered into the idea of media polarisation, which favours trust".
- "I think that it is fundamentally due to the obvious illiteracy of the Portuguese in this
  matter. It seems to me that, contrary to what happens in other countries with high
  levels of literacy (where distrust in relation to the media is, in some cases, very
  strong), the Portuguese have little critical sense regarding the information made
  available to them";
- "I tend to think that perhaps people associate journalism with 'Telejornal'. I feel that people are informed mainly through television. Somehow they must feel identified (...) I don't know if it necessarily means whether they trust journalism. Then when you go to see reactions to news, interpretations about polls, suddenly the talk of fake news, of the cabal, jumps out. I'm not so sure that the idea of trust is that trusting."
- "Compared to other countries, where there are more reading habits... I think it's simply because they are not very attentive. The Portuguese are more detached and trusting. Unfortunately, that's what I have to say on this subject".

# Q8. How can journalism be differentiated from other content, informative or misinformative, on social media or search engines? What measures can be taken?

The solutions to the confusion between journalistic and non-journalistic content are neither obvious nor clear to the interviewees. The category "create differentiation labels that can guide readers" was the most mentioned, followed by a greater investment of media literacy and a warning about journalistic production itself. "Journalism itself must differentiate itself from other content on social media", it refers. "It is essential to give credibility to the brands of information so that people know that information comes from a specific media and that this media is trustworthy." It also proposes communication campaigns on the differences in content, tighter regulation, accompanied by monitoring. The categorisation used focused on three topics, according to the answers obtained: a) labels, b) media literacy, c) improving journalistic production.



Even without conclusions, some ways to solve the problem are pointed out in more detail in the following quotes:

- "There should be certification seals for [journalistic media] products and then there
  should be a political effort that can somehow minimise the impact of misinformation
  from the networks and get the media back to where they should be and where they
  once were."
- "Watermarking the media is essential, so that people know as easily as possible
  where the information is coming from. And it is essential to make those information
  brands credible, so that people know that a piece of information comes from a
  specific media and that that media is trustworthy and credible."
- "Only with literacy skills can we separate journalism from other content. But there
  must also be an ethical posture on the part of the media so that it is understood that
  we are dealing with different things."

# Q9. What do you consider to be the main current problems and challenges of the media business in terms of economic sustainability?

In the Portuguese media ecosystem one of the most often talked about and discussed threats is the economic viability of the media and the impact that the financial weakness of many companies has on the quality of the journalism produced.

The theme most pointed out by the interviewees in this study is the sustainability of media companies and the challenge of finding a viable business model. However, there are two different points of view on the business issue: those who defend that journalism should not be seen as a business, and those who consider that it is necessary to recover the idea that you have to pay to have access to information. "We believe that journalism is not a business and that it should obey other logics and other assumptions", they say. On the other hand, some voices argue that it is necessary to "recover the idea that you have to pay to get information".

Among the reflections, the statement "the media business is increasingly aimed at a niche that is shrinking" stands out. On the other hand, the new generations are informed by means other than the traditional ones. About the challenges, and for those who defend that the media has to transform itself as a business, the emphasis is on "rethinking forms of financing that do not jeopardise independence". It is also acknowledged that there has been "an effort to diversify income". The categorisation adopted in this case is necessarily very open and general: a) find a viable business model, b) journalism is not a business, c) rethink funding models, d) recover payment for information.

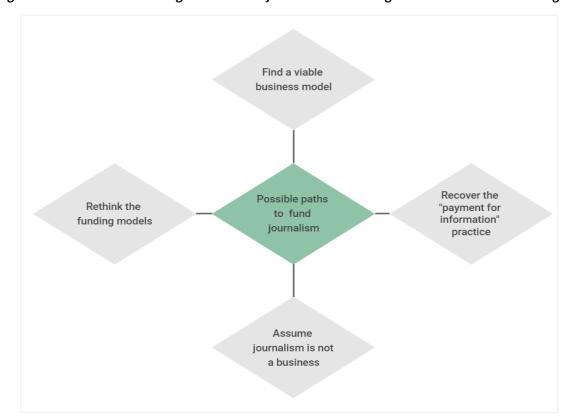


Figure 38. Identified strategies to solve journalism funding related issues in Portugal

Source: own elaboration.

Again, given the diversity of views, key quotes from interviewees help enrich the debate:

- "It is necessary to create other ways of financing the media, at the level of the state, patronage and tax benefits";
- "The lack of preparation of businessmen is the main problem. The newsrooms are prepared, people are increasingly better prepared in the newsrooms and we have businessmen that are deeply unprepared and lack the capacity to know how to wait and understand that bets take time to show results (...) It is necessary to give time, trust and even if the results do not start being positive, not to stop investing, because we easily get into a vicious circle. The company does not generate profit, so I do not invest, but when I do not invest the company cannot have a differentiating product":
- "The main problem of the media is the business. Information is no longer a business
  in itself, especially in Portugal, where people are not very interested in paying for
  what they read and do not see an added value in having that content. So, the biggest
  challenge is to achieve economic sustainability".

Q10. What do you consider key to developing the business of your medium / media group? a) More advertising, other revenues and B2B business models such as sponsored content, b) subscriptions and individual funding (crowdfunding, patrons, etc.), c) public funding (how?); or d) private funding (grants, specific projects, etc.)?

A majority of editorial managers consider that ways of diversifying income may be the solution, but there are also those who believe that there are alternative ways, even without recourse to advertising.



The three interviewees who defend the idea that journalism should not be seen as a business prefer a press without advertising. The remaining possibilities presented are generally well received by all, with one or another nuance. "Diversifying revenues" is the way forward, they say. And this strategy seems to be already being used by some companies. Still, the preferred model, as it is more mentioned and developed in the answers, is that of private funding, through generic grants or support to specific projects.

As far as public funding is concerned, there is some consensus as to the possibility that this support does not necessarily have to be monetary and can be effective through fiscal support. If it is monetary, there is always the proviso that it should be transversal to the means and carried out in a transparent manner. The subscription model is defended above all by traditional media companies, installed in the market. As far as advertising is concerned, the B2B model is highlighted. And one of the interviewees adds that it is important to think about the possibility of avoiding invasive, annoying advertising, which may drive away readers. The categorisation established a priori in the question itself was respected: a) more advertising and other B2B revenues, such as sponsored content; b) subscriptions and individual funding, crowdfunding, among others; c) public funding; d) private funding.

Interviewees' statements reinforce the main indications set out above:

- "Path goes through more advertising investment better paid, be it 'traditional' advertising, branded content provided it is properly flagged and done by a team outside the newsroom -, sponsorships (the "powered by"). Grants for specific projects can be an option but only serve one-off cases for background research."
- "All but A. The future of the kind of journalism we do is based on several proposals for funding journalism that we have already presented to the Secretary of State at the time."
- "Public support that may not necessarily be monetary. Bet on the personalisation of content. Knowing better who consumes you and serving them better".

#### 2.6.3 Conclusions

The quantitative approach to the qualitative information gathered in the interviews helps better understand, in terms of magnitude, the editor's general vision of editorial managers of their media activity, specifically of journalism in Portugal. The quotes presented, extracted from the interviews, serve as first-person testimony of crucial ideas to be retained in this study on the media situation in Portugal.

Given the general perception of disinformation being a threat to the future of the media in Portugal (and beyond), it is almost a contradiction that the analysis of the answers allows us to conclude that most media outlets do not have a news verification protocol.

In general terms, we can extract from the results that media with a news verification protocol are rare, and most admit to having already spread fake news that had social networks as their source. To combat the risk of spreading disinformation, they explain that the verification procedures have been strengthened, but as a general rule keeping traditional methods and without recourse to practices or specific training in fact-checking.



In the same sense, somewhat worryingly, the analysis of the answers allows us to draw two fundamental conclusions: only a minority of the interviewees are sure that they have not spread disinformation originating from social networks in their environment, and the overwhelming majority confirms that this has happened, or at least may have happened.

The warning seems to have had an effect only in part of the media. As the media questioned, only half reinforced the verification procedures, and only two applied appropriate methodologies. The idea that procedures were reinforced based on usual verification techniques and not on fact-checking methods dominates.

There is a lack of general training on misinformation issues or fact-checking to complement some apparent inaction on disinformation issues. This shows how disinformation issues are not seen as fundamental in a potential training process for journalists in the newsroom.

In an almost contradiction with some embarrassment evidenced by several interviewees regarding training on disinformation, having more training is one of the priorities to improve working conditions and the quality of journalism. Other changes desired by the interviewees are better salaries and more conditions for journalists to reconcile their professional and personal life.

Almost the same priorities as in the previous question were repeated to improve the quality of newsrooms: respect for contracts – especially schedules – to give space for journalists' personal lives and offer them training.

The issue of the Portuguese people's trust in the media is not consensually perceived. Most interviewees consider that the high trust of the Portuguese is due to the recognition of the quality of traditional media. However, one-third oppose this optimistic view of journalism by the audiences, relating it to an extended lack of critical sense due to the illiteracy of the media and journalism by the Portuguese.

This is a recurring doubt: why do the Portuguese trust the media? Besides, editorial decision-makers are divided to try to understand the phenomenon. Once again, an attempt at an unequivocal answer is left open.

Still within the scope of trust, one of the problems about which there are many recurring doubts is how to avoid confusion between journalistic and non-journalistic content. The solutions are neither obvious nor clear for the report interviewees, which leads us, once again, to be left with more questions than paths to follow.

The issue of the consequences of media economic sustainability and the survival of journalism had different paths to follow, according to the interviewees. Two prominent and almost opposite points of view stand out: on one side, those who defend that journalism should not be seen as a business. On the other side are those who consider it necessary to recover the payment to access information.

The development of the business of the journalistic media passes, according to most interviewees, through the diversification of income sources. There was consensus that this may be the solution, but some believed in the existence of alternative paths, even without resorting to advertising. Another near consensus is the need to involve the State and the public sector in media financing, but through systems that do not go through direct financing to avoid problems of lack of transparency or subjective evaluation.



# The impact of disinformation on the media industry in Spain and Portugal

The sample of interviewees, designed by the researcher's choice and not representative of editors in Portugal, provided clear indications of practices that needed to be rethought, challenges to be faced, and changes to be made in order for the national media ecosystem to become more robust, more resistant to misinformation, trustworthy in the eyes of audiences, financially sustainable and rewarding in all aspects for journalists.

# 3. Ethics procedures for the treatment of evaluation data

In this part, we would like to show how the data collection process was implemented for Portugal and Spain teams.

In the case of Spain, the data were treated according to the Organic Law 3/2018, from 5 December on the Protection of Personal Data and Digital Rights Guarantee and the RGPD, which approves the regulation implementing Organic Law 3/2018. Likewise, the data processing will be regulated to the University of Valencia's functions, defined by the Organic Law 6/2001, from 21 December, by the Statutes and intern rules and regulations as well any rules and regulations surging from the application. Among others, the collected data can be used for academic, administrative, statistical, scientific, research, and cultural and divulgating aims, as well as for assistance with everyone's consultations, suggestions and complaints. In any case, the specific use will always be adjusted to the objectives for which the data was collected.

On the other hand, in Portugal data was collected and treated according to Law No. 58/2019 from August 8, 2019 on the Protection of Personal Data and Digital Rights Guarantee /RGPD. As in the case of Spain, the collected data can be used for academic, administrative, statistical, scientific, research, and cultural and divulgating aims, as well as for assistance with everyone's consultations, suggestions and complaints. In any case, the specific use will always be adjusted to the objectives for which the data was collected.

In this sense, the technical and organisational measures implemented to safeguard the rights and freedoms of the data subjects/research depended on the research phase carried out by IBERIFIER research teams from Portugal and Spain. Four phases were identified:

- 1. Publics who responded to Portugal and Spain surveys.
- 2. Data acquisition during the interviews with media editors from Spain and Portugal. During the interviews in Portugal and Spain, data was gathered through video and audio (generally by online platform), typing or other means. However, other means, not video or audio, will be purely anonymised data. The audio and video recordings from the interviews needed to be transcripted to analyse the answers.
- 3. Data and video processing and analysis
- 4. Once processed, the pooled and anonymised results were analysed from the surveys and interviews.
- 5. Research results publication

The processed results will be published in internal reports, EC deliverables, open-access journals and repositories. Spain's team has the database from Portugal and Spain surveys. In addition, the University of Valencia will keep Spain's interviews and transcriptions saved in the institutional cloud. Once the project is finalised, UVEG will upload the database to the Roderic repository according to the signature of the open science agreement.

Interviewees were asked to read carefully the information document before deciding if they want to participate in the research. Those editors who were willing to participate will be given a consent document, which will also include the consent for the dissemination of photographs and videos of the participant. Information and the consent documents were translated into at least one official language of the countries where the editors' interviews take place. Namely, Spanish and Portuguese Information and consent documents were distributed, once translated, in combination with the translated signing forms described, according to the Data Protection Officer at the University of Valencia.



## 4. Conclusions

The population trusted national and international health institutions in Spain and Portugal and accepted the recommendation to vaccinate against Covid-19. At a time of great scientific uncertainty and widespread misinformation, both countries agreed that the recommendations of the World Health Organisation for mass vaccination were the most beneficial for our Iberian societies. Spain and Portugal have been exemplary in the European Union for achieving high rates of complete vaccination among all population groups, especially among the elderly and most vulnerable. In Spain in November 2022, 85.74% of the population had the full vaccination schedule; in Portugal, it still increased a few tenths more to 85.77%. This scenario of trust in researchers, scientists and experts is the first meeting point between the responses of the two countries to the surveys launched in the framework of the IBIERIFIER project.

In Portugal, 78.7% of respondents trusted researchers/experts in the first place, journalists in second place with 56.2% responses, and doctors in third place with 39.6%. In Spain, trust in these professional sectors is in the same order of response as in Portugal, with slight nuances in the percentages. In the first place, 89.6% of respondents chose researchers/experts in one of the three categories; in second place, journalists, with 58.4% of responses; and in third place, doctors, with 38.5% of responses. In Spain, trust in researchers was chosen as one of the three response options by almost 9 out of 10 respondents. However, agreement on trust in the source of expert information seems to follow the same pattern in both countries.

Concerning whether media paywalls could prevent the dissemination of fake news, respondents were very sceptical in Spain. On the scale they had to answer from 0 to 10, where zero was that paying for information would not influence its "veracity" and ten would mean that it would influence it greatly, respondents scored an average of 4.5 points. Somehow, respondents would perceive misinformation as unrelated to whether the information is paid for or free, but it would depend on the topics covered. In Portugal, more than 4 out of 5 interviewees (86%) claim to have come across disinformation content in news media about once a week. Respondents associate this content mostly to poor quality journalism (78%) and to news pieces with partially manipulated facts. Politics is the most identified topic among identified disinformation content (71%) and respondents reveal higher concern regarding partially or completely false content being disseminated by political agents (government, politicians or political parties (84%). It should also be noted that respondents to the query reveal considerably lower concern about disinformation originating in family members, colleagues or friends - only 44% of the sample shows concern about these, as a disinformation source. Consequently, interviewees tend to be more trustful of information originating in friends, colleagues or family members than they do in politicians or government officials.

The data from the survey analysis in Spain show no significant differences in the results according to socio-demographic variables nor in the ideological self-perception of the participants. For example, they were positioned on the numerical scales according to the parties they indicated they had voted for during the last elections. During the hypothesis testing, it was found that there are no significant differences according to ideological position for re-trusting a media outlet that published a fake news story. However, highly significant differences were obtained for item 7 on the loss of trust in media that publish fake news (Spanish survey) and gender. Therefore, we can conclude that gender influences the loss of trust in the media that publishes fake news or hoaxes. In this sense, those who identify



as "man" would have a more significant loss of trust in a media outlet and would not regain it. The responses of those who identify as "women" stated that they would be able to regain trust in the media. Concerning the degree of trust in the contents published by the media, significant differences were observed according to the political party they voted for in the last elections. One-third (33.3%) of PSOE voters had complete trust in the information published by the media; however, 45.7% of Unidas Podemos voters had little trust; and 5.5% of PP voters had half trust.

In Portugal, about 72% of respondents claim to have lost trust in a news source after coming across disinformation while consulting it. However, only about 1 out of 4 among these (73%) say they stopped using said source or following it on social media. As in Spain, no significant differences were found across different demographics in this instance. As possible steps for future research, it would be of great interest to measure and analyse the relationship established by consumers between disinformation and the perception of intentionality in the dissemination of false facts. In the field of disinformation studies, these two dimensions are of paramount importance as they might allow a deeper understanding of how consumers recognise journalism and journalistic production processes as vulnerable / resistant to disinformation phenomena. This may, also, be useful to determine how the presence of disinformation in mainstream journalism really impacts trust, the relationship with brands and journalists and, ultimately, the impact of disinformation on the economic stability of news brands.

Regarding the interviews conducted with media editors in Portugal and Spain, some emerging points were summarised as findings:

- Media outlets and verification protocol. In Portugal, a few media editors confirmed they had agreements with news verification platforms. However, verification procedures were strengthened, but traditional methods were generally maintained. In the case of Spain, only one editor stated that they had contracted a verified platform during an election campaign. However, the rest of the time, they considered that it was the job of journalists to verify the information and that journalism is actually about finding the veracity of information sources and verifying them. Therefore, they considered that media outlets did not have to rely on the services of fact-checking platforms.
- Dissemination of fake news and social media. Portugal editors stated most have already disseminated fake news that was sourced from social media. Spain editors emphasised that their staff not only did not contribute to disseminating disinformation through the use of the networks but that although they were very active on the networks, and they acted as a firewall against unverified information.
- Training in fact-checking. In Spain, only in two interviews editors indicated the existence of specific training courses for the staff. In general, training in detecting hoaxes or false information is based on experience and/or professional recommendations, which in some cases are more systematised. In Portugal, editors agreed to outside the Iberifier project, there was no training in fact-checking. Only the partners and one or two individual cases.
- Trust and quality of information. Trust and quality of information. The press trust is justified by some media quality, with particular reference to the public channels, but also by the illiteracy of the Portuguese, i.e. the lack of literacy to ask questions to the media. In addition, in Portugal, editors had a consensus on the need to differentiate journalistic content from other content, to be achieved through labels. This is why there is also a call for a more outstanding commitment to citizens' literacy. In Spain, editors agreed that the quality of information published by the media is higher than content circulated through other channels and social networks.



Concerning this, some editors even explained the work they carry out as verifiers. For example, they were publishing corrections if necessary. If it is on paper, the following day, they would include a note stating that the item story m was incorrect for whatever reason and explaining it. In digital, they also would include a note explaining that this item's story would be modified for whatever reason. In both countries, editors considered that media information is of better quality through other channels and that it could be even better if journalists' working conditions were improved.

- Journalists' working conditions and salaries. In both Portugal and Spain, the precarious working conditions of journalists are a constant topic of debate. Newsrooms have very few professionals, long working hours and meagre salaries. These conditions mean that several people did not supervise professional routines, and the information was not treated with the best possible quality in many cases. In Portugal editors agreed that better salaries, better conditions so that journalists could have the right to their personal life, more training (and continuous training) were the suggestions that would find more echo among the journalists ("better salaries", "respecting schedules and shifts" or "updating salaries"). On a second level, there was the need to promote stable contractual ties and to put an end to "green receipts". Several interviewees, in Spain, insisted on not linking the salary with the quality of the information generated because they refer to an endemic evil of the profession itself. Moreover, the lack of prestige and valuation of the profession at the social level was very present in the responses.
- Journalism and advertising. In Portugal, some editors/publishers argued that journalism should not be seen as a business and preferred journalism to renounce advertising. The vast majority preferred a mix of funding models and emphasised the role of private support, with different possibilities. Those who defended public funding explain that it did not necessarily have to be in the form of money but could take the form of tax subsidies. In Spain, there are public media at local, regional and national levels. There is no advertising on the leading Spanish Radio and Television channel (RTVE). However, other local media, especially those linked to local councils, publish advertising as a source of income to survive. In any case, the relationship between public channels and advertising was not present in the debate. In both countries, editors agreed that the public identified public media as publishing higher-quality information.

In both countries, citizens identified that spreading disinformation was a crucial social problem and trusted journalists as fact-checking agents. Undoubtedly, the loss of trust in the media would translate into a loss of followers with severe economic consequences.

In this respect, editors interviewed in Portugal & Spain were unanimous in stating that the fake news dissemination by media would ultimately affect their economic benefits, either by decreasing the followers, subscriber numbers or their prestige and credibility, as well as something intangible but precious, such as reputation.

# 5. Bibliography

Amoedo, A., Vara-Miguel, A., Negredo, S., Moreno, E., Kaufmann, J. (2021). Digital News Report España 2021. Pamplona: Servicio de Publicaciones de la Universidad de Navarra. DOI: https://doi.org/10.15581/019.003

AIMC (2022) Marco General de Medios, 2022. Asociación para la Investigación de Medios de Comunicación.

Marco General de Medios 2021. Asociación para la Investigación de Medios de Comunicación /https://www.aimc.es/a1mc-c0nt3nt/uploads/2021/02/marco2021.pdf

Cardoso, G., Paisana, M., Pinto-Martinho, A., (2017). Reuters Institute Digital News Report 2017 Portugal. Lisboa: OberCom – Observatório da Comunicação. Disponível em: https://obercom.pt/wp-content/uploads/2017/12/2017-Reuters-Institute-DNR-PT.pdf

Cardoso, G., Mendonça, S., Crespo, M., Azevedo, J., Sousa, J., Paisana, M. (2017b). Jornalistas e Condições Laborais: Retrato de uma Profissão em Transformação. Lisboa: OberCom — Observatório da Comunicação. Disponível em: https://obercom.pt/wpcontent/uploads/2017/03/2017\_OBERCOM\_Jornalistas\_Condicoes\_Laborais.pdf

Cardoso, G., Paisana, M., Pinto-Martinho, A., (2019). Reuters Institute Digital News Report 2019 Portugal. Lisboa: OberCom – Observatório da Comunicação. Disponível em: https://obercom.pt/wp-content/uploads/2019/12/RDNRP-WEB-SETEMBRO.pdf

Cardoso, G., Baldi, V., Paisana, M., Couraceiro, P., Barros, C. (2021). Anuário da Comunicação 2021. Lisboa: OberCom – Observatório da Comunicação. Available at: https://obercom.pt/wp-content/uploads/2022/07/Anua%CC%81rio\_2021\_final-1.pdf.

Cardoso, G., Paisana, M., Pinto-Martinho, A. (2022). Digital News Report Portugal 2022. Lisboa: OberCom – Observatório da Comunicação. Available at: https://obercom.pt/wpcontent/uploads/2022/06/DNRPT\_2022\_FINAL\_14Jun.pdf

Centro de Estudios Sociológicos (CIS) Estudio número 3375. Barómetro de septiembre de 2022.https://www.cis.es/cis/export/sites/default/Archivos/Marginales/3360\_3379/3375/es3 375mar.pdf

ERC – Entidade Reguladora para a Comunicação Social, Diretiva/2022/1, Diretiva para a cobertura informativa televisiva de guerras e conflitos armados. Available at: https://www.erc.pt/document.php?id=OTcwNjMyN2EtNDc5ZS00ZWU5LWE4ZTctNjIxMGQ1MTg2OTdm.

European Commission. Eurobarometer (2022). Flash Eurobarometer FL011EP: Media & News Survey 2022 – Data Europa EU [Internet]. 2022. Available at: https://data.europa.eu/data/datasets/s2832\_fl011ep\_eng?locale=en

European Commission. Standard Eurobarometer 96 - Winter 2021-2022 - April 2022 - Eurobarometer survey [Internet]. Brussels: 2022. Available at: https://europa.eu/eurobarometer/surveys/detail/2553



European Commission. Standard Eurobarometer 94 – Winter 2020-2021 – Eurobarometer survey [Internet]. 2021. Available at: https://europa.eu/eurobarometer/surveys/detail/2553

European Commission. Standard Eurobarometer 92 – Outono 2019 – Eurobarometer survey [Internet]. 2020. Available at: https://europa.eu/eurobarometer/surveys/detail/2255

Esteban-Navarro, M.-Á.; Nogales-Bocio, A.-I.; García-Madurga, M.-Á.; Morte-Nadal, T. Spanish (2021) Fact-Checking Services: An Approach to Their Business Models. Publications 2021, 9, 38. Available at: https://doi.org/10.3390/publications9030038

Global Disinformation Index. (2021). The Online News Market in Spain. Available at: https://www.disinformationindex.org/country-studies/2021-9-30-the-online-news-market-in-spain/

Newman, N., Levy, D., Nielsen, R.K. (2015). Reuters Institute Digital News Report 2015. Oxford: Reuters Institute for the Study of Journalism. Available at: https://www.digitalnewsreport.org/survey/2015/

Newman, N., Fletcher, R., Schulz, A., Andi, S., and Nielsen, R.K. (2020). Reuters Institute Digital News Report 2020. Oxford: Reuters Institute for the Study of Journalism. Available at: https://www.digitalnewsreport.org/survey/2020/

Newman, N., Fletcher, R., Schulz, A., Andi, S., Robertson, C.T., Nielsen, R. K. (2021). Reuters Institute Digital News Report 2021. Oxford: Reuters Institute for the Study of Journalism. Available at: https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2021

Newman, N., Fletcher, R., Robertson, C. T., Eddy, K., Nielsen, R. K. (2022). Reuters Institute Digital News Report 2022. Oxford: Reuters Institute for the Study of Journalism. Available at: https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2022

Ufarte-Ruiz, María-José; Peralta-García, Lidia; Murcia-Verdú, Francisco-José (2018). "Fact checking: un nuevo desafío del periodismo". El profesional de la información, v. 27, n. 4, pp. 733-741 Available at: .https://doi.org/10.3145/epi.2018.jul.02

Madrid Press Association (2021) Informe Anual de la Profesión Periodística, 2021. Available at: https://www.apmadrid.es/wp-content/uploads/2022/10/Informe-anual-Profesion-Periodistica-2021\_web\_lite.pdf



# 6. Annexes

# Annex 1. Media mentioned by participants in the Spanish survey as main source of news (question 3)

List of media mentioned by participants in the survey as an answer to the question: Could you tell us up to three means through which you usually get information? For example, the name of some newspaper(s), radio channel(s), television channel(s), etc.

There are three different tables: at the first one, private mass media are mentioned and the second one compiles the public media organised by the corporation they belong to. The last one collects the responses that do not specifically mention mass media (for example: Internet, or social media, or instant messaging apps, etc).

Table 22. Private mass media mentioned by participants in the Spanish survey

Medios	SUM de SUM de Frecuencia
El País	223
Cadena Ser	152
<u>eldiario.es</u>	153
La Sexta	86
Antena 3	64
El Mundo	56
Público	60
Onda Cero	39
El Confidencial	33
Infolibre	31
Levante-EMV	30
La Vanguardia	33
Cope	27
Telecinco	16
Las Provincias	13
ABC	12
Es.radio	11
El Periódico	11
The New York Times	11
Cubadebate	10
20 minutos	10
Diario de Navarra	9
Vilaweb	8
The Guardian	8
Telesur	8
Heraldo de Aragón	8
CTXT	8



	_
Ara.cat	7
Russia Today	7
Libération	7
El Salto	7
BBC	7
Televisión Cubana (ICRT)	7
El Correo	6
Cuatro	6
Diario Informacion	6
Diario Vasco	6
The Objective	5
La Razón	5
Valencia Plaza	4
Prensa Latina	4
OK diario	4
Marca	4
La Marea	4
Financial Times	4
Emisora CMKC	4
El Economista	4
Huffington Post	4
Periódico Granma	3
Menéame	3
Le Monde	3
La Voz de Galicia	3
El Periódico de Aragón	3
Diario de Cádiz	3
Carne cruda	3
Berria	3
Atresmedia	3
Agència Catalana de Notícies (ACN)	3
Rac	3
El Español	3
Trece TV	3
Vozpopuli	2
The Washington Post	2
The Conversation	2
Radio Reloj	2
La Última Hora	2
Periódico Venceremos	2
NTV Cuba	2



Newtral	2
Gara/Naiz	3
Maldita	2
Málaga hoy	2
La Opinión de A Coruña	2
La Opinión	2
La Haine	2
Juventud Rebelde	2
HispanTV	2
Expansión	2
El toro	2
El Plural	2
El Periódico de Catalunya	2
Descifrando la guerra	2
Canal Caribe	2
Cadena 100	2
As	2
Arainfo	2
Ángel Martín	2
Al Jazeera	2
El Periódico de España	2
Xornal Nós	1
W Radio	1
Upday	1
The political room	1
The Economist	1
Televalencia noticias	1
Sur	1
Sud ouest	1
SITVC	1
Rtv	1
RTP	1
Radio San Borondón	1
Radio Rebelde	1
Odissey	1
Noticiero	1
Nodo 50	1
Nexta TV	1
NationalCat	1
Nació digital	1
Más 65	1
Lanza Digital	1



Lacartadelabolsa.com	1
La voz de César Vidal	1
La voz de Asturias	1
La Veu	1
La Región	1
La opinión de Málaga	1
La Nueva España	1
La Jornada de México	1
La gaceta de Salamanca	1
La Directa	1
La cafetera de radiocable	1
Kloshletter	1
Kaos en la red	1
Ideal (Vocento)	1
Grupo Fórmula (Cadena de radio)	1
Granada Hoy	1
France 24	1
Foro TV (Televisa)	1
El faro de vigo	1
Factual.afp	1
Europasur	1
Europa press	1
Euronews	1
Epoch Times	1
<u>Elplural.com</u>	1
<u>Elperiodic.com</u>	1
El Universal (diario)	1
El Progreso	1
El periódico de la energía	1
El Periódico de Extremadura	1
El Norte de Castilla	1
El Nacionat.cat	1
El independiente	1
El Faradio	1
El Diario Montañes	1
El destape	1
El debate	1
El comercio	1
eco.pt	1
dw.com	1
Disclose TV	1



Diario noticias	1
Diario de Navarra	1
Diario Granma	1
Diario del Altoaragón (periódico)	1
Diario de Sevilla	1
Diario de Mallorca	1
Diario de Jerez	1
Diario de avisos	1
Diario Córdoba	1
Diario	1
Decisión Radio	1
Daily Telegraph	1
Courrier international	1
CNN en español	1
Clarín (Buenos Aires)	1
Castellon plaza	1
Canarias7	1
Cadena Copenhague	1
Almayadeen	1
Alma Mater	1
Alicante Plaza	1
8Mediterranea	1
7nn noticias	1
5w	1
5 Días	1
	1425

Source: own elaboration

Table 23. Public mass media mentioned by participants as main source of accessing to information

Public media		
RTVE	RNE	49
	TVE	116
	RTVE	11
RTVV	ÀPunt	13
CARTV	Aragón TV	6
CRTVG	TVG	1
	Radio Galega	1
RTVC	TV Canaria	2
RTPA	TPA	1
RTVA	Canal Sur Radio	1
EPRTVIB	IB3 Radio	1
Ayuntamiento Barcelona	BETEVE	1
CCMA	TV3 o 3/24 (televisiones	12
	Emisoras de radio	6
EITB	Eitb	5
	emisoras de radio	4

Source: own elaboration.

Table 24. Other sources of information mentioned by participants in the Spanish survey that are not mass media or are unspecific.

Other responses	Frequency
Social media	28
Others	55
Internet	7
Google	11
Telegram	3

The category "others" includes responses that, instead of giving specific names, used descriptors of the kind of media used for accessing the information (for example users said podcast, digital newspapers, magazines, specialised blogs...).



#### Annex 2. Informed consent for the interviews with media editors

# INFORMED CONSENT TO PARTICIPATE IN THE IBERIFIER RESEARCH PROJECT

## 1. Information on the project

# 1.1 Name of the project

IBERIFIER: Iberian Digital Media Research and Fact-Checking Hub (Observatorio para luchar contra la desinformación en España y Portugal)

## 1.2 What is the aim of the study?

IBERIFIER is a three-year project funded by the European Commission that will set up a Spanish-Portuguese Disinformation Observatory. The project has five lines of work:

Research on the characteristics and trends of the Iberian digital media ecosystem.

Develop computational technologies for the early detection of disinformation.

Verify and disprove disinformation in the Iberian territory, reporting to the European Commission.

Also prepare strategic reports on disinformation threats, both for public knowledge and for the authorities in Spain and Portugal.

Work on media literacy initiatives aimed at journalists and reporters, young people and society as a whole.

### 1.3 Why does my opinion matter in this study?

We want you to participate because you are part of the media system. In this interview we want to know to what extent there are direct economic effects on the media when they disseminate misinformation.

# 1.4 Do I have to participate?

It is up to you to participate. You are free to withdraw at any time, without giving a reason. You can decide not to have your interview taken into account for our research, if you so choose.

#### 1.5 What information will you provide me with?

We will explain how to access the project information and we will also ask you to sign a consent form so that we know you have agreed to participate.

#### 1.6 What will happen to me if I participate?

If you participate in the interview, you will contribute greatly to our qualitative research. Your data will be anonymised and processed in a way that contributes to IBERIFIER's overall results, but without revealing your identity at any time.



## 1.7 What about expenses?

Participation in the interview is, in principle, free of charge. Our research teams will travel to conduct the interview, either via online platforms or via email questionnaire. Everything will be done in a way that does not entail any cost for the interviewee.

#### 1.8 What will I have to do?

Answer the questions we ask you honestly and without giving personal information that could identify other people.

# 1.9 What are the possible disadvantages and risks of participating?

There are no risks associated with participation in this study.

# 1.10 What are the potential benefits of participating?

There are no direct benefits to you for participating in this study. However, your participation will help to improve the way in which information is communicated to individuals and stakeholders and thus move towards a better informed society.

# 1.11 What if there is a problem?

If you are concerned about any aspect of this study, you can ask to speak to the researchers who will do their best to answer your questions by writing to the IBERIFIER coordinator, Ramón Salaverría (rsalaver@unav.es).

#### 2. How will we treat your data?

### 2.1 Our commitment to privacy

The IBERIFIER project is highly committed to guaranteeing your fundamental right to data protection and your right to your own image. To this end, we have taken all appropriate measures to comply with Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (RGPD) and the applicable national law, Organic Law 3/2018 of 5 December on the Protection of Personal Data and Guarantee of Digital Rights (LOPDGG).

#### 2.2 Who processes my data?

This activity in which you are going to participate is led by the ScienceFlows team of the University of Valencia (UVEG). Therefore, from the UVEG we are responsible for the treatment of this data.

Universitat de València-Estudi General CIF Q4618001D Edificio del Rectorado. Avda. Blasco Ibáñez, 13 46010 Valencia



## 2.3 Who can help me if I have a question about my rights?

Data Protection Officer
Javier Plaza Penadés
Delegado de Protección de Datos
Ed. Rectorado
Av.Blasco Ibañez, 13
VALÈNCIA 46010
lopd@uv.es

Teléfono: 34 96 162 54 31

### 2.4 For what purpose do you process my data?

Contact details (telephone number and email) will be used to maintain contact with the interviewees, to enable the <u>IBERIFIER</u> team to make the necessary logistical arrangements to enable the successful participation of the interviewees and to share future results from this research study with them.

Photographs and videos will be taken during interviews for dissemination purposes. Only when interviewees expressly consent to be included in photographs or videos will they appear in them.

#### 2.5 On what legal basis will you process my data?

By agreeing to participate in the study after reading this legal information you are consenting to establish a relationship with IBERIFIER that involves processing your identification data and pseudonymised recordings. This legitimacy is found in article 6.1.b) of the General Data Protection Regulation. Likewise, consent will be requested to take your images and guarantee your right to your own image under the terms of Organic Law 1/1982, of 5 May, on the civil protection of the right to honour, personal and family privacy and your own image and to process your data based on article 6.1.a) of the General Data Protection Regulation.

## 2.6 Who has access to my data?

Our study is part of the IBERIFIER project, led by the University of Navarra, which coordinates, manages and organises this study. The research entities associated with the project may use your aggregated or pseudonymised data.

You can find information about the <u>IBERIFIER</u> Project, funded by the European Commission under the CEF-TC-2020-2 (European Digital Media Observatory) agreement with reference 2020-EU-IA-0252.

In the event that you consent to us taking images for dissemination purposes they will be disseminated to the media, network spaces or social media, and in audiovisual productions.

## 2.7 How long will you keep my data?

The data will be kept for the duration of the project and, in any case, destroyed 5 years after the first publication of results.

Images taken for dissemination purposes will be kept for as long as the supports and media that publish them exist.



## 2.8 What are my rights?

You may exercise your rights of access, rectification, cancellation or opposition at any time. The exercise of these rights is personal and free of charge, and must be carried out by submitting a request that must include:

- Name and surname of the person concerned.
- Photocopy of the national identity card of the interested party or equivalent official document.
- Identification, where appropriate, of the person representing him/her, as well as the document accrediting such representation.
- Petition specifying the application.
- Address for the purpose of notifications, date and signature of the applicant.
- Documents in support of the request being made, where appropriate.

The application shall be addressed to:

Servei d'Informàtica - Protección de datos Universitat de València Avda. Blasco Ibáñez, 13 Edifico de Rectorado 46010 Valencia lopd@uv.es

# 2.9 Do I have other rights?

You will be provided with an anonymous ID for your identification in the framework of the project. All interviews will be anonymised. Statements will not be identified with photographs that may be used for the dissemination of the study, nor with names of specific individuals.

As mentioned above, all your interview will be audio-recorded for transcription and analysis, and will be stored securely in accordance with data protection legislation. Only members of the **IBERIFIER** project will be able to consult this information before anonymising.



# **Annex 3. Consent form**

Mr. / Mrs	, of legal
age, holder of identity card number:	, I hereby declare that:
I have been informed about the characteristics of the	ne Research Project entitled: IBERIFIER
I have read both section 1 of this document ent entitled "confidentiality commitment", and I have be arisen in this respect. I consider that I have unders	en able to formulate the doubts that have
I am informed of the possibility of withdrawing at a	ny time.
On the basis of these conditions, I agree to participate	pate in this citizen consultation.
In witness whereof, I have signed this document below.	at the place and on the date indicated
City:,	2022.
Name and surname	
of the participant	Signature

# IBERIFIER - Iberia Media Research & Fact-Checking

IBERIFIER is a digital media observatory in Spain and Portugal funded by the European Commission, linked to the European Digital Media Observatory (EDMO). It is made up of twelve universities, five fact-checking organizations and news agencies, and six multidisciplinary research centers.

Its main mission is to analyze the Iberian digital media ecosystem and tackle the problem of misinformation. To do this, it focuses its research on five lines of work:

- 1. Research on the characteristics and trends of the Iberian digital media ecosystem.
- 2. Development of computational technologies for the early detection of misinformation.
- 3. Verification of misinformation in the Iberian territory.
- 4. Preparation of strategic reports on threats of disinformation, both for public knowledge and for the authorities of Spain and Portugal.
- 5. Promotion of media literacy initiatives, aimed at journalists and informants, young people and society as a whole.

Contacts	
	Website: iberifier.eu
	Twitter: @iberifier
	Report coordinators: Carolina Moreno-Castro (carolina.moreno@uv.es) Miguel Paisana (miguel.paisana@obercom.pt)
	IBERIFIER coordinator: Ramón Salaverría ( <u>rsalaver@unav.es</u> )



# www.iberifier.eu

#### Coordinator



#### **Partners**



























































IBERIFIER has received funding from the European Commission under the agreement CEF-TC-2020-2 (European Digital Media Observatory) with reference 2020-EU-IA-0252

